Permit to Operate

FACILITY: S-34

EXPIRATION DATE 08/31/200

LEGAL OWNER OR OPERATOR: EQUILON ENTERPRISES LLC
MAILING ADDRESS: P.O BOX 1476
BAKERSFIELD, CA 93302-1476

FACILITY LOCATION: 3663 GIBSON ST (AREA 3)
BAKERSFIELD, CA 93302

FACILITY DESCRIPTION: PETROLEUM REFINERY

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

The Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

DAVID L. CROW
Executive Director / APCO

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Director of Permit Services

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-0-1 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:

PERMIT UNIT REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)], [Federally Enforceable Through Title V]

2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)], [Federally Enforceable Through Title V]

3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0], [Federally Enforceable Through Title V]

4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (3/21/02). [District Rule 2010, 3.0 and 4.0; and 2020], [Federally Enforceable Through Title V]

5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1], [Federally Enforceable Through Title V]

6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031], [Federally Enforceable Through Title V]

7. Every application for a permit required under Rule 2010 (12/17/92) (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040], [Federally Enforceable Through Title V]

8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1], [Federally Enforceable Through Title V]

9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1], [Federally Enforceable Through Title V]

11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with Section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0], [Federally Enforceable Through Title V]

12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit . [District Rule 2520, 9.7], [Federally Enforceable Through Title V]

13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2], [Federally Enforceable Through Title V]

14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3], [Federally Enforceable Through Title V]

15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4], [Federally Enforceable Through Title V]

16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5], [Federally Enforceable Through Title V]

17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9], [Federally Enforceable Through Title V]

18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1], [Federally Enforceable Through Title V]

19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2], [Federally Enforceable Through Title V]

20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3], [Federally Enforceable Through Title V]

21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4], [Federally Enforceable Through Title V]

22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (11/15/01), by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)], [Federally Enforceable Through Title V]

23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 (10/31/01) for use or sale within the District. [District Rule 4601, 5.1], [Federally Enforceable Through Title V]

24. All VOC-containing materials for architectural coatings subject to Rule 4601 (10/31/01) shall be stored in closed containers when not in use. [District Rule 4601, 5.4], [Federally Enforceable Through Title V]

25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (10/31/01). [District Rule 4601, 6.1 and 6.3], [Federally Enforceable Through Title V]

26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0], [Federally Enforceable Through Title V]

27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR 82, Subpart F. [40 CFR 82 Subpart F], [Federally Enforceable Through Title V]

28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B], [Federally Enforceable Through Title V]

29. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021(11/15/01) or Rule 8011 (11/15/01). [District Rule 8021 and 8011], [Federally Enforceable Through Title V]

30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8031 and 8011], [Federally Enforceable Through Title V]

31. An owner/operator shall prevent or cleanup any carryout and trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (11/15/01) or Rule 8011 (11/15/01) [District Rule 8041 and 8011], [Federally Enforceable Through Title V]

32. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8051 and 8011], [Federally Enforceable Through Title V]

33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8061 and 8011], [Federally Enforceable Through Title V]

34. Any unpaved vehicle/equipment area that anticipates more than 75 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 100 vehicle trips per day shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8071 and 8011], [Federally Enforceable Through Title V]

35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M], [Federally Enforceable Through Title V]

36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16], [Federally Enforceable Through Title V]

37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2], [Federally Enforceable Through Title V]

38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permit shall apply. [District Rule 2520, 9.1.1], [Federally Enforceable Through Title V]

39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

40. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92);2070 , section 7.0 (12/17/92); 2080 (12/17/92); 4101 (12/17/92); 4601, sections 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2 (9/17/97); 8020 (4/25/96); 8030 (4/25/96); 8060 (4/25/96); A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

42. On January 31, 2003, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520], [Federally Enforceable Through Title V]

43. Facility shall comply with all applicable provisions of 40 CFR Part 61, Subpart FF. [40 CFR 61.342(e)], [Federally Enforceable Through Title V]

44. Facility shall comply with all applicable requirements regarding preparation and implementation of a risk management plan (RMP) by August 31, 1999, and shall abide by all applicable sections of 40 CFR Part 68. [40 CFR Part 68], [Federally Enforceable Through Title V]

45. Emission rates for all units subject to specific limiting condition shall not exceed PM10: 345.1 lb/day, NOx (as NO2): 552.0 lb/day, VOC: 360.0 lb/day and CO: 528.0 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]

46. Except on days when a startup or shutdown of SRU #2 occurs, the SOx (as SO2) emission rate for all units subject to specific limiting condition shall not exceed 600.0 lb/day. On days when a startup or shutdown of SRU #2 occurs, the SOx (as SO2) emission rate for all units subject to specific limiting condition shall not exceed 1800.0 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-1-4 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
CRUDE UNIT INCLUDING DESALTERS, 96 MMBTU/HR REFINERY/NATURAL GAS FIRED CRUDE HEATER H-100 WITH LOW NOX BURNERS, NOX, CO, AND O2 CEM, FRACTIONING TOWER (V-101), STRIPPER (V-103), AND MISC PUMPS, PIPING, & HEAT EXCHANGERS

PERMIT UNIT REQUIREMENTS

1. Permittee shall meet all applicable requirements of NSPS Subparts A and J. [District Rule 4001], [Federally Enforceable Through Title V]
2. Heater H-100 shall be served by operational NOx, CO, and O2 continuous emission monitors (CEMs). CEM data shall be reduced to one hour averages. [District Rule 2201 & 4305]
3. NOx, CO, and O2 CEMs shall comply with all applicable requirements of Rule 1080, Stack Monitoring. [District Rule 1080], [Federally Enforceable Through Title V]
4. Heater H-100 emission rates shall not exceed any of the following NOx (as NO2): 0.036 lb/MMBtu or 30 ppmvd @ 3% O2, or CO: 400 ppmvd @ 3% O2 . NOx and CO emission rates are on a one hour average. [District Rules 2520, 9.3.2, 4305 & 4351]
5. Fuel gas sulfur content (as H2S) shall not exceed 0.1 gr/ dscf (160 ppmv) over a three hour rolling average and shall be continuously monitored and recorded. [District Rule 4001], [Federally Enforceable Through Title V]
6. Exhaust stack shall be equipped with adequate provisions facilitating the collection of samples consistent with EPA test methods. [District Rule 1081], [Federally Enforceable Through Title V]
7. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 2520, 9.3.2, 4305 and 4351], [Federally Enforceable Through Title V]
8. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 2520, 9.3.2, 4305 and 4351], [Federally Enforceable Through Title V]
9. If permittee fails any measurement for NOx and/or CO emission limits when testing not less than once every 36 months, NOx and CO emission limits shall be measured not less than once every 12 months. [District Rules 2520, 9.3.2, 4305 and 4351], [Federally Enforceable Through Title V]
10. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rules 2520, 9.3.2, 4305 and 4351], [Federally Enforceable Through Title V]
11. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081], [Federally Enforceable Through Title V]
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
15. This unit is included in the specific limiting condition emission limit listed in the facility wide requirements. [District NSR Rule], [Federally Enforceable Through Title V]
16. Permittee shall maintain records of fuel hhv and cumulative annual fuel use. [District Rules 2520, 9.4.2 and 4351], [Federally Enforceable Through Title V]
17. Permittee shall maintain the following daily records: fuel type and amount used, permitted emissions factors and daily emissions for each air contaminant emitted. [District NSR Rule], [Federally Enforceable Through Title V]

18. Records required by this permit shall be retained on site for a period of at least five (5) years and shall be made readily available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]

19. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081(amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

20. All emissions measurements shall be made with the unit operating at normal firing rate, air-to-fuel ratio, and fuel quality. No determination of compliance with NOx and CO concentration limits shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or during start-up, shutdown, or breakdown conditions. [District Rules 4305 5.5.2 and District Rule 4351 5.7.2], [Federally Enforceable Through Title V]

21. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA (recordkeeping effective upon permit issuance). [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera); District Rule 1080, 7.2], [Federally Enforceable Through Title V]

22. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements (recordkeeping effective upon permit issuance). [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera);District Rule 1080, 7.3; 40 CFR 60.7 (b)], [Federally Enforceable Through Title V]

23. The continuous NOx monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA (monitoring effective upon permit issuance). [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera) and District Rule 1080, 6.7], [Federally Enforceable Through Title V]

24. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours (reporting effective upon permit issuance). [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera) and District Rule 1080, 9.0], [Federally Enforceable Through Title V]

25. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. Operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event (reporting effective upon permit issuance). [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera) and District Rule 1080, 10.0], [Federally Enforceable Through Title V]

26. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include: a.) Time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; b.) Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; c.) Applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; d.) A negative declaration when no excess emissions occurred (reporting effective upon permit issuance). [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera) and District Rule 1080, 8.0], [Federally Enforceable Through Title V]

27. The permittee shall maintain records of the date and time of O2 measurements and burner adjustments, the measured O2 concentrations (by volume), and the observed settings. The records must also include a description of any corrective action taken to maintain the O2 concentration and the burner mechanical settings in the acceptable range. These records shall be retained at the facility for a period of no less than two years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4305], [Federally Enforceable Through Title V]

28. If the O2 concentration or the burner mechanical settings deviate from the acceptable range, the permittee shall notify the District and return the O2 concentration or burner mechanical settings to within the acceptable range as soon as possible but no longer than one (1) hour after detection. If the O2 concentration or the burner settings are not returned to within the acceptable range within one hour, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods, to demonstrate compliance with the applicable emission limits. [District Rule 4305], [Federally Enforceable Through Title V]

29. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

30. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

31. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

32. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]

33. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]

34. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]

35. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]

36. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]

37. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

38. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

39. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

40. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

41. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

42. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

43. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

44. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found. [District Rules 4451, 6.2.1 and 4452, 6.2.1], [Federally Enforceable Through Title V]

45. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

46. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

47. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

48. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

49. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

50. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

51. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

52. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

53. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0], [Federally Enforceable Through Title V]

54. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]

55. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]

56. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

57. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

58. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

59. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2; 4305, 6.2.1; and 4351, 6.2.1], [Federally Enforceable Through Title V]

60. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 4801], [Federally Enforceable Through Title V]

61. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 2520, 9.3.2, 4305, 5.0, 8.2 and/or 4351, 8.1], [Federally Enforceable Through Title V]

62. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2], [Federally Enforceable Through Title V]

63. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

64. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

65. The operator shall not burn in any fuel gas combustion device any fuel that contains hydrogen sulfide (H2S) in excess of 0.1 gr/dscf (230 mg/dscm) [40 CFR 60.104(a)(1)], [Federally Enforceable Through Title V]

66. For fuel gas combustion devices, a continuous emissions monitoring system shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60.105(a)(3). CEM results shall be calculated on a rolling three (3) hour basis. [40 CFR 60, 60.105(a)(3)], [Federally Enforceable Through Title V]

67. For fuel gas combustion devices, operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 0.10 gr/dscf (230 mg/dscm) or during which the average concentration of SO2 as measured by the SO2 continuous monitoring system exceeds 20 ppm (dry basis, zero percent excess air). [40 CFR 60.105(e)(3)], [Federally Enforceable Through Title V]

68. Operator shall determine compliance with the H2S standard using EPA Methods 11, 15, 15A, or 16. [40 CFR 60.106(e)], [Federally Enforceable Through Title V]

69. For any periods for which sulfur dioxide or oxides emissions data are not available, the operator shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability. [40 CFR 60.107(d)], [Federally Enforceable Through Title V]

70. The owner or operator shall submit the reports required under this subpart to the District semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. The owner or operator shall submit a signed statement certifying the accuracy and completeness of the information contained in the report. [40 CFR 60.107(e) and 60.107(f)], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-2-5 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
VACUUM UNIT INCLUDING 38.3 MM BTU/HR REFINERY GAS FIRED HEATER H-200 W/ 10 JOHN ZINK LNC-PC-35 BURNERS, THERMAL DENOX SYSTEM, DISTILLATION TOWER, 3 STEAM INJECTORS, EJECTOR DISCHARGE DRUM (V-201), AND MISC. PUMPS, PIPING, HEAT EXCHANGERS, AND VESSELS.

PERMIT UNIT REQUIREMENTS

1. Permittee shall meet all applicable requirements of NSPS Subparts A and J. [District Rule 4001], [Federally Enforceable Through Title V]
2. Sour water pumped from ejector discharge drum shall be treated in sour water strippers prior to disposal. [District NSR Rule], [Federally Enforceable Through Title V]
3. Fuel gas sulfur content (as H2S) shall not exceed 0.10 gr/dscf (160 ppmv) over a three hour rolling average and shall be continuously monitored and recorded. [District Rule 4001], [Federally Enforceable Through Title V]
4. Heater H200 emission rates shall not exceed NOx (as NO2): 0.18 lb/MMBtu or 147 ppmvd @ 3% O2 and CO: 400 ppmvd @ 3% O2. NOx and CO emission rates are on a one hour average. [District Rules 2520, 9.3.2, 4305 and 4351]
5. Combustion devices shall be served by operational emissions (O2 and NOx) monitoring systems. [District NSR Rule], [Federally Enforceable Through Title V]
6. Ammonia injection rate and steam pressure shall be continuously recorded. [District NSR Rule], [Federally Enforceable Through Title V]
7. Exhaust stack shall be equipped with adequate provisions facilitating the collection of samples consistent with EPA test methods. [District Rule 1081], [Federally Enforceable Through Title V]
8. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 2520, 9.3.2, 4305 and 4351], [Federally Enforceable Through Title V]
9. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 2520, 9.3.2, 4305 and 4351], [Federally Enforceable Through Title V]
10. If permittee fails any measurements for NOx and/or CO emission limits when testing not less than once every 36 months, NOx and CO emission limits shall be measured not less than once every 12 months. [District Rules 2520, 9.3.2, 4305 and 4351], [Federally Enforceable Through Title V]
11. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rules 2520, 9.3.2, 4305 and 4351], [Federally Enforceable Through Title V]
12. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081], [Federally Enforceable Through Title V]
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
15. This unit is included in the specific limiting condition emission limit listed in the facility wide requirements. [District NSR Rule], [Federally Enforceable Through Title V]
16. Permittee shall maintain records of fuel hhv and cumulative annual fuel use. [District Rules 2520, 9.4.2 and 4351], [Federally Enforceable Through Title V]
17. Permittee shall maintain the following daily records: fuel type and amount used, permitted emissions factors and daily emissions for each air contaminant emitted. [District NSR Rule], [Federally Enforceable Through Title V]
18. Records required by this permit shall be retained on site for a period of at least five (5) years and shall be made readily available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]

19. All emissions measurements shall be made with the unit operating at normal firing rate, air-to-fuel ratio, and fuel quality. No determination of compliance with NOx and CO concentration limits shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or during start-up, shutdown, or breakdown conditions. [District Rules 4305 5.5.2 and District Rule 4351 5.7.2], [Federally Enforceable Through Title V]

20. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

21. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

22. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

23. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]

24. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]

25. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]

26. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]

27. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]

28. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

29. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

30. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

31. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

32. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

33. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

34. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

35. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found. [District Rules 4451, 6.2.1 and 4452, 6.2.1], [Federally Enforceable Through Title V]

36. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

37. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

38. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

39. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

40. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

41. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

42. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

43. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

44. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0], [Federally Enforceable Through Title V]

45. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]

46. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]

47. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

48. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

49. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

50. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2; 4305, 6.2.1; and 4351, 6.2.1], [Federally Enforceable Through Title V]

51. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 4801], [Federally Enforceable Through Title V]

52. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 2520, 9.3.2, 4305, 5.0, 8.2 and/or 4351, 8.1], [Federally Enforceable Through Title V]

53. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2], [Federally Enforceable Through Title V]

54. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

55. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

56. The operator shall not burn in any fuel gas combustion device any fuel that contains hydrogen sulfide (H2S) in excess of 0.1 gr/dscf (230 mg/dscm) [40 CFR 60.104(a)(1)], [Federally Enforceable Through Title V]

57. For fuel gas combustion devices, a continuous emissions monitoring system shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60.105(a)(3). CEM results shall be calculated on a rolling three (3) hour basis. [40 CFR 60, 60.105(a)(3)], [Federally Enforceable Through Title V]

58. For fuel gas combustion devices, operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 0.10 gr/dscf (230 mg/dscm) or during which the average concentration of SO2 as measured by the SO2 continuous monitoring system exceeds 20 ppm (dry basis, zero percent excess air). [40 CFR 60.105(e)(3)], [Federally Enforceable Through Title V]

59. Operator shall determine compliance with the H2S standard using EPA Methods 11, 15, 15A, or 16. [40 CFR 60.106(e)], [Federally Enforceable Through Title V]

60. For any periods for which sulfur dioxide or oxides emissions data are not available, the operator shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability. [40 CFR 60.107(d)], [Federally Enforceable Through Title V]

61. The owner or operator shall submit the reports required under this subpart to the District semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. The owner or operator shall submit a signed statement certifying the accuracy and completeness of the information contained in the report. [40 CFR 60.107(e) and 60.107(f)], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-3-11 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
DELAYED COKING OPERATION INCL DISTILLATION TOWER, (2) 35 MMBTU/HR GAS FIRED HTRS, QUENCH SYSTEM, COKE DRUMS, KNOCKOUT DRUM, COKE DRUM SUMP, STRIPPER TOWERS, COMPRESSORS, MISC. PUMPS, PIPING, & VESSELS, & UTILIZING HTRS H-100 (S-34-1) & H-200 (S-34-2)

PERMIT UNIT REQUIREMENTS

1. Operation shall include compressor knockout drum V-310, dry drum V-311, quench gas compressor C-300, quench gas storage tanks V-924A/B, heater H-100 (part of S-34-1), and heater H-200 (part of S-34-2). [District Rule 2201], [Federally Enforceable Through Title V]
2. Quench system shall include quench tower, gas recovery compressor, two gas storage pressure vessels, oily emulsions holding tank and oily emulsions truck unloading system. [District Rule 2201], [Federally Enforceable Through Title V]
3. Coke drums vents shall be served by optional water scrubber. [District Rule 2080], [Federally Enforceable Through Title V]
4. Permittee shall meet all applicable requirements of 40 CFR 60 Subparts A, J, and GGG. [District Rule 4001], [Federally Enforceable Through Title V]
5. Heaters H-300A and H-300B shall be each be served by operational NOx, CO, and O2 continuous emission monitors (CEMs). [District Rule 2201 and District Rule 4305, 5.4.2], [Federally Enforceable Through Title V]
6. NOx, CO, and O2 CEM shall comply with all applicable requirements of Rule 1080, Stack Monitoring. [District Rule 1080], [Federally Enforceable Through Title V]
7. Drain from bottom of steam stripper V-313 shall be blinded during normal operation. [District Rule 2201], [Federally Enforceable Through Title V]
8. Drain from V-312 overhead piping shall be a closed, vapor-tight, hose connector. [District Rule 2201], [Federally Enforceable Through Title V]
9. All sampling connections, open-ended valves or lines shall be equipped with two closed valves or be capped with blind flanges or threaded plugs except during actual use. [District Rule 2201], [Federally Enforceable Through Title V]
10. Oily emulsions holding tank shall vent only to vapor recovery system. [District Rule 2201], [Federally Enforceable Through Title V]
11. Only emulsions generated in Areas 1, 2, 3 shall be received. [District Rule 2201], [Federally Enforceable Through Title V]
12. Heaters H-300A/B emission rates shall not exceed NOx (as NO2): 0.18 lb/MMBtu or 147 ppmvd @ 3% O2, and CO: 400 ppmvd @ 3% O2. NOx and CO emission rates are on a one hour average. [District Rule 2520, 9.3.2, District Rule 4305, and District Rule 4351], [Federally Enforceable Through Title V]
13. Exhaust stack shall be equipped with adequate provisions facilitating the collection of samples consistent with EPA test methods. [District Rule 1081], [Federally Enforceable Through Title V]
14. All emissions measurements shall be made with the unit operating at normal firing rate, air-to-fuel ratio, and fuel quality. No determination of compliance with NOx and CO concentration limits shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or during start-up, shutdown, or breakdown conditions. [District Rules 4305 5.5.2 and District Rule 4351 5.7.2], [Federally Enforceable Through Title V]
15. This unit is included in the specific limiting condition emission limit listed in the facility wide requirements. [District Rule 2201], [Federally Enforceable Through Title V]
16. Permittee shall maintain records of fuel hhv and cumulative annual fuel use. [District Rule 4351 6.1.1], [Federally Enforceable Through Title V]
17. For each unit subject to SLC, permittee shall maintain the following daily records: fuel type and amount used, permitted emissions factors and daily emissions for each air contaminant emitted. [District Rule 2201], [Federally Enforceable Through Title V]
18. Permittee shall maintain records of date, time, and duration for each of the following periods: a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, decoking operation, startup, shutdown, and breakdown. [District Rule 1070], [Federally Enforceable Through Title V]

19. Records required by this permit shall be retained on site for a period of at least five (5) years and shall be made readily available for District inspection upon request. [District Rule 2520, 9.4.2 and District Rule 2201], [Federally Enforceable Through Title V]

20. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080 and Kern County Rule 108], [Federally Enforceable Through Title V]

21. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEMs that have been installed pursuant to District Rule 1080, and emission measurements. [District Rule 1080 and Kern County Rule 108], [Federally Enforceable Through Title V]

22. The continuous monitoring system shall meet the performance specification requirements in 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080 and Kern County Rule 108], [Federally Enforceable Through Title V]

23. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080 and Kern County Rule 108], [Federally Enforceable Through Title V]

24. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. Operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080 and Kern County Rule 108], [Federally Enforceable Through Title V]

25. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include: A) time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B) averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; C) applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; D) a negative declaration when no excess emissions occurred. [District Rule 1080 and Kern County Rule 108], [Federally Enforceable Through Title V]

26. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rules 2520, 9.3.2, 4305 and 4351], [Federally Enforceable Through Title V]

27. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 2520, 9.3.2, 4305 and 4351], [Federally Enforceable Through Title V]

28. If permittee fails any compliance demonstration for NOx and/or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 2520, 9.3.2, 4305 and 4351], [Federally Enforceable Through Title V]

29. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rules 2520, 9.3.2, 4305 and 4351], [Federally Enforceable Through Title V]

30. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081], [Federally Enforceable Through Title V]

31. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]

32. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]

33. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 1070, 4305, and 4351 and Kern County Rule 107], [Federally Enforceable Through Title V]

34. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081], [Federally Enforceable Through Title V]

35. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 2520, 9.3.2, 4305, 6.3.2, and 4351, 6.3], [Federally Enforceable Through Title V]

36. The following conditions must be met for representative unit(s) to be used to test for NOx limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]

37. All units in a group for which representative units are source for NOx emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rule 2520, 9.3.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]

38. All units in a group for which representative units are source tested for NOx emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2], [Federally Enforceable Through Title V]

39. The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

40. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

41. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081(amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

42. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 19, 1993). [District Rule 1081, and Kern County Rule 108.1], [Federally Enforceable Through Title V]

43. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

44. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]

45. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]

46. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

47. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

48. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

49. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2; 4305, 6.2.1; and 4351, 6.2.1], [Federally Enforceable Through Title V]

50. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 4801 and Kern County Rule 407], [Federally Enforceable Through Title V]

51. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 2520, 9.3.2, 4305, 5.0, 8.2 and/or 4351, 8.1], [Federally Enforceable Through Title V]

52. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2], [Federally Enforceable Through Title V]

53. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

54. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

55. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

56. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]

57. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]

58. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]

59. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]

60. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]

61. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

62. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

63. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

64. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

65. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

66. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

67. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

68. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

69. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

70. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

71. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

72. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

73. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

74. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

75. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

76. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1 & 4452, 6.2.1], [Federally Enforceable Through Title V]

77. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0], [Federally Enforceable Through Title V]

78. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so, the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)], [Federally Enforceable Through Title V]

79. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)], [Federally Enforceable Through Title V]

80. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)], [Federally Enforceable Through Title V]

81. Each PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)], [Federally Enforceable Through Title V]

82. Any PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)], [Federally Enforceable Through Title V]

83. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)], [Federally Enforceable Through Title V]

84. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)], [Federally Enforceable Through Title V]

85. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 60.482-2(a)(2) and (d)(4) and the daily requirements of 40 CFR 60.482-2(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 60.482-2(h)], [Federally Enforceable Through Title V]

86. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)], [Federally Enforceable Through Title V]

87. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)], [Federally Enforceable Through Title V]

88. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)], [Federally Enforceable Through Title V]

89. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)], [Federally Enforceable Through Title V]

90. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)], [Federally Enforceable Through Title V]

91. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)], [Federally Enforceable Through Title V]

92. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)], [Federally Enforceable Through Title V]

93. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)], [Federally Enforceable Through Title V]

94. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)], [Federally Enforceable Through Title V]

95. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)], [Federally Enforceable Through Title V]

96. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)], [Federally Enforceable Through Title V]

97. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)], [Federally Enforceable Through Title V]

98. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)], [Federally Enforceable Through Title V]

99. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)], [Federally Enforceable Through Title V]

100. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)], [Federally Enforceable Through Title V]

101. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)], [Federally Enforceable Through Title V]

102. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)], [Federally Enforceable Through Title V]

103. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)], [Federally Enforceable Through Title V]

104. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)], [Federally Enforceable Through Title V]

105. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)], [Federally Enforceable Through Title V]

106. Flares used to comply with Subpart GGG shall comply with the requirements of 40 CFR 60.18. [40 CFR 60.482-10(d)], [Federally Enforceable Through Title V]

107. Owners or operators of control devices used to comply with the provisions of Subpart GGG shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10(e)], [Federally Enforceable Through Title V]

108. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)], [Federally Enforceable Through Title V]

109. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)], [Federally Enforceable Through Title V]

110. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)], [Federally Enforceable Through Title V]

111. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)], [Federally Enforceable Through Title V]

112. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)], [Federally Enforceable Through Title V]

113. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)], [Federally Enforceable Through Title V]

114. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)], [Federally Enforceable Through Title V]

115. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)], [Federally Enforceable Through Title V]

116. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)], [Federally Enforceable Through Title V]

117. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)], [Federally Enforceable Through Title V]

118. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)], [Federally Enforceable Through Title V]

119. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)], [Federally Enforceable Through Title V]

120. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)], [Federally Enforceable Through Title V]

121. The owner or operator shall determine compliance with the standards of flares as specified in 40 CFR 60.485(g)(1), (2), (3), (4), (5), (6), and (7). [40 CFR 60.485(g)], [Federally Enforceable Through Title V]

122. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)], [Federally Enforceable Through Title V]

123. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)], [Federally Enforceable Through Title V]

124. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000'' if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

125. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)], [Federally Enforceable Through Title V]

126. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)], [Federally Enforceable Through Title V]

127. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)], [Federally Enforceable Through Title V]

128. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)], [Federally Enforceable Through Title V]

129. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)], [Federally Enforceable Through Title V]

130. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)], [Federally Enforceable Through Title V]

131. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)], [Federally Enforceable Through Title V]

132. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [District 40 CFR 60.486(k)], [Federally Enforceable Through Title V]

133. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)], [Federally Enforceable Through Title V]

134. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)], [Federally Enforceable Through Title V]

135. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)], [Federally Enforceable Through Title V]

136. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)], [Federally Enforceable Through Title V]

137. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)], [Federally Enforceable Through Title V]

138. Any existing reciprocating compressor that becomes an affected facility under provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h) provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h). [40 CFR 60.593(c)], [Federally Enforceable Through Title V]

139. An owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)], [Federally Enforceable Through Title V]

140. Pumps in light liquid service and valves in gas/vapor and light liquid service within a procesic compounds of usually high molecular weight that consist of many repeated links, each link being a relatively light and simple molecule. [40 CFR 60.593(e)], [Federally Enforceable Through Title V]

141. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)], [Federally Enforceable Through Title V]

142. The operator shall not burn in any fuel gas combustion device any fuel that contains hydrogen sulfide (H2S) in excess of 0.1 gr/dscf (230 mg/dscm) [40 CFR 60.104(a)(1)], [Federally Enforceable Through Title V]

143. For fuel gas combustion devices, a continuous emissions monitoring system shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60.105(a)(3). CEM results shall be calculated on a rolling three (3) hour basis. [40 CFR 60, 60.105(a)(3)], [Federally Enforceable Through Title V]

144. For fuel gas combustion devices, operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 0.10 gr/dscf (230 mg/dscm) or during which the average concentration of SO2 as measured by the SO2 continuous monitoring system exceeds 20 ppm (dry basis, zero percent excess air). [40 CFR 60.105(e)(3)], [Federally Enforceable Through Title V]

145. Operator shall determine compliance with the H2S standard using EPA Methods 11, 15, 15A, or 16. [40 CFR 60.106(e)], [Federally Enforceable Through Title V]

146. For any periods for which sulfur dioxide or oxides emissions data are not available, the operator shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability. [40 CFR 60.107(d)], [Federally Enforceable Through Title V]

147. The owner or operator shall submit the reports required under this subpart to the District semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. The owner or operator shall submit a signed statement certifying the accuracy and completeness of the information contained in the report. [40 CFR 60.107(e) and 60.107(f)], [Federally Enforceable Through Title V]

148. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

149. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

150. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

151. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart GGG. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-4-3 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
GAS CONCENTRATION OPERATION INCLUDING 2 ABSORBERS (34-V-402+403), NAPHTHA STABILIZER (V-404), COMPRESSOR (C-400) AND MISCELLANEOUS VESSELS, DRUMS, EXCHANGERS AND PUMPS.

PERMIT UNIT REQUIREMENTS

1. Permittee shall meet all applicable requirements of NSPS Subparts A, J and GGG. [District Rule 4001], [Federally Enforceable Through Title V]
2. Fuel gas sulfur content (as H2S) shall not exceed 0.10 gr/dscf (160 ppmv) over a three hour rolling average and shall be continuously monitored and recorded. [District Rule 4001], [Federally Enforceable Through Title V]
3. All sampling connections, open-ended valves or lines shall be equipped with two closed valves or be capped with blind flanges or threaded plugs except during actual use. [District NSR Rule], [Federally Enforceable Through Title V]
4. Bypass piping around PSV-404 to flare header, in compressor C-400 discharge, shall be closed except when depressurizing compressor system during breakdown conditions. [District NSR Rule], [Federally Enforceable Through Title V]
5. Naphtha stabilizer overheads accumulator (V-405) bypass piping to flare header shall be closed except during start-up and breakdown conditions. [District NSR Rule], [Federally Enforceable Through Title V]
6. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
7. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
8. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
9. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]
10. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]
11. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]
12. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]
13. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]
14. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

15. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

16. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

17. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

18. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

19. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

20. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

21. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found. [District Rules 4451, 6.2.1 and 4452, 6.2.1], [Federally Enforceable Through Title V]

22. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

23. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

24. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

25. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

26. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

27. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

28. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

29. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

30. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0], [Federally Enforceable Through Title V]

31. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so, the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)], [Federally Enforceable Through Title V]

32. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)], [Federally Enforceable Through Title V]

33. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)], [Federally Enforceable Through Title V]

34. Each PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)], [Federally Enforceable Through Title V]

35. Any PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)], [Federally Enforceable Through Title V]

36. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)], [Federally Enforceable Through Title V]

37. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)], [Federally Enforceable Through Title V]

38. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 60.482-2(a)(2) and (d)(4) and the daily requirements of 40 CFR 60.482-2(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 60.482-2(h)], [Federally Enforceable Through Title V]

39. Any existing reciprocating compressor in a process unit which becomes an affected facility under the provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3(a), (b), (c), (d), (e), and (h). [40 CFR 60.482-3(j)], [Federally Enforceable Through Title V]

40. Unless exempt under 40 CFR 60.593, compressor C-400 shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR 60.482-3(h) and (i). The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. Each compressor shall be operated and equipped as specified in 40 CFR 60.482-3(b)(1), (2), or (3). [40 CFR 60.482-3(a), (b), and (c)] [District Rule], [Federally Enforceable Through Title V]

41. If a barrier fluid system is used for compressor C-400, the barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system or both. Each sensor shall be checked daily or shall be equipped with an audible alarm. The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier system, or both based on the established criterion, a leak is detected. [40 CFR 60.482-3(d), (e), and (f)] [District Rule], [Federally Enforceable Through Title V]

42. If a barrier fluid system is used for compressor C-400, detected leaks shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-3(g)] [District Rule], [Federally Enforceable Through Title V]

43. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)], [Federally Enforceable Through Title V]

44. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)], [Federally Enforceable Through Title V]

45. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)], [Federally Enforceable Through Title V]

46. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)], [Federally Enforceable Through Title V]

47. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)], [Federally Enforceable Through Title V]

48. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)], [Federally Enforceable Through Title V]

49. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)], [Federally Enforceable Through Title V]

50. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)], [Federally Enforceable Through Title V]

51. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)], [Federally Enforceable Through Title V]

52. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)], [Federally Enforceable Through Title V]

53. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)], [Federally Enforceable Through Title V]

54. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)], [Federally Enforceable Through Title V]

55. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)], [Federally Enforceable Through Title V]

56. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)], [Federally Enforceable Through Title V]

57. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)], [Federally Enforceable Through Title V]

58. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)], [Federally Enforceable Through Title V]

59. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)], [Federally Enforceable Through Title V]

60. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)], [Federally Enforceable Through Title V]

61. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)], [Federally Enforceable Through Title V]

62. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)], [Federally Enforceable Through Title V]

63. Flares used to comply with Subpart GGG shall comply with the requirements of 40 CFR 60.18. [40 CFR 60.482-10(d)], [Federally Enforceable Through Title V]

64. Owners or operators of control devices used to comply with the provisions of Subpart GGG shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10(e)], [Federally Enforceable Through Title V]

65. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)], [Federally Enforceable Through Title V]

66. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)], [Federally Enforceable Through Title V]

67. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)], [Federally Enforceable Through Title V]

68. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)], [Federally Enforceable Through Title V]

69. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)], [Federally Enforceable Through Title V]

70. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)], [Federally Enforceable Through Title V]

71. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)], [Federally Enforceable Through Title V]

72. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)], [Federally Enforceable Through Title V]

73. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)], [Federally Enforceable Through Title V]

74. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)], [Federally Enforceable Through Title V]

75. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)], [Federally Enforceable Through Title V]

76. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)], [Federally Enforceable Through Title V]

77. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)], [Federally Enforceable Through Title V]

78. The owner or operator shall determine compliance with the standards of flares as specified in 40 CFR 60.485(g)(1), (2), (3), (4), (5), (6), and (7). [40 CFR 60.485(g)], [Federally Enforceable Through Title V]

79. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)], [Federally Enforceable Through Title V]

80. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)], [Federally Enforceable Through Title V]

81. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000'' if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

82. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)], [Federally Enforceable Through Title V]

83. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)], [Federally Enforceable Through Title V]

84. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)], [Federally Enforceable Through Title V]

85. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)], [Federally Enforceable Through Title V]

86. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)], [Federally Enforceable Through Title V]

87. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)], [Federally Enforceable Through Title V]

88. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)], [Federally Enforceable Through Title V]

89. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [District 40 CFR 60.486(k)], [Federally Enforceable Through Title V]

90. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)], [Federally Enforceable Through Title V]

91. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)], [Federally Enforceable Through Title V]

92. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)], [Federally Enforceable Through Title V]

93. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)], [Federally Enforceable Through Title V]

94. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)], [Federally Enforceable Through Title V]

95. Any existing reciprocating compressor that becomes an affected facility under provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h) provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h). [40 CFR 60.593(c)], [Federally Enforceable Through Title V]

96. An owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)], [Federally Enforceable Through Title V]

97. Pumps in light liquid service and valves in gas/vapor and light liquid service within a procesic compounds of usually high molecular weight that consist of many repeated links, each link being a relatively light and simple molecule. [40 CFR 60.593(e)], [Federally Enforceable Through Title V]

98. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)], [Federally Enforceable Through Title V]

99. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

100. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

101. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart GGG. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

102. The operator shall not burn in any fuel gas combustion device any fuel that contains hydrogen sulfide (H2S) in excess of 0.1 gr/dscf (230 mg/dscm) [40 CFR 60.104(a)(1)], [Federally Enforceable Through Title V]

103. For fuel gas combustion devices, a continuous emissions monitoring system shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60.105(a)(3). CEM results shall be calculated on a rolling three (3) hour basis. [40 CFR 60, 60.105(a)(3)], [Federally Enforceable Through Title V]

104. For fuel gas combustion devices, operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 0.10 gr/dscf (230 mg/dscm) or during which the average concentration of SO2 as measured by the SO2 continuous monitoring system exceeds 20 ppm (dry basis, zero percent excess air). [40 CFR 60.105(e)(3)], [Federally Enforceable Through Title V]

105. Operator shall determine compliance with the H2S standard using EPA Methods 11, 15, 15A, or 16. [40 CFR 60.106(e)], [Federally Enforceable Through Title V]

106. For any periods for which sulfur dioxide or oxides emissions data are not available, the operator shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability. [40 CFR 60.107(d)], [Federally Enforceable Through Title V]

107. The owner or operator shall submit the reports required under this subpart to the District semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. The owner or operator shall submit a signed statement certifying the accuracy and completeness of the information contained in the report. [40 CFR 60.107(e) and 60.107(f)], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-5-4 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
AMINE TREATING OPERATION INCLUDING VAPOR RECOVERY (V-110), LPG (V-406) AND COKER FUEL GAS (V-413) CONTACTORS, RICH AMINE FLASH DRUM, FUEL DISTRIBUTION SYSTEM, PIPING TO PERMIT S-33-14, AMINE SUMP AND MISCELLANEOUS PUMPS, PIPING AND VESSELS.

PERMIT UNIT REQUIREMENTS

1. Amine sump shall be equipped with leak free (as defined in Rule 4451) cover and vent only to carbon adsorbers. [District NSR Rule], [Federally Enforceable Through Title V]
2. Permittee shall meet all applicable requirements of NSPS Subparts A and GGG. [District Rule 4001], [Federally Enforceable Through Title V]
3. All sampling connections, open-ended valves or lines shall be equipped with two closed valves or be capped with blind flanges or threaded plugs except during actual use. [District NSR Rule], [Federally Enforceable Through Title V]
4. During normal operation rich amine shall be balanced between Area I and Area III. [District NSR Rule], [Federally Enforceable Through Title V]
5. LPG drying and treating skid equipment vents shall be closed at all times except during flooding with nitrogen gas during charging and after steam purging of the equipment during blowdown. [District NSR Rule], [Federally Enforceable Through Title V]
6. LPG drying and treating skid liquids shall be piped in a closed system to KOH degassing pot, except for heel of condensed steam following steam purging which may, instead be pumped to a closed vessel for appropriate offsite disposal. [District NSR Rule], [Federally Enforceable Through Title V]
7. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
8. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
9. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
10. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]
11. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]
12. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]
13. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]
14. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]

15. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

16. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

17. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

18. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

19. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

20. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

21. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

22. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found. [District Rules 4451, 6.2.1 and 4452, 6.2.1], [Federally Enforceable Through Title V]

23. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

24. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

25. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

26. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

27. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

28. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

29. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

30. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

31. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0], [Federally Enforceable Through Title V]

32. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so, the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)], [Federally Enforceable Through Title V]

33. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)], [Federally Enforceable Through Title V]

34. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)], [Federally Enforceable Through Title V]

35. Each PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)], [Federally Enforceable Through Title V]

36. Any PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)], [Federally Enforceable Through Title V]

37. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)], [Federally Enforceable Through Title V]

38. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)], [Federally Enforceable Through Title V]

39. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 60.482-2(a)(2) and (d)(4) and the daily requirements of 40 CFR 60.482-2(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 60.482-2(h)], [Federally Enforceable Through Title V]

40. Any existing reciprocating compressor in a process unit which becomes an affected facility under the provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3(a), (b), (c), (d), (e), and (h). [40 CFR 60.482-3(j)], [Federally Enforceable Through Title V]

41. Compressor 87C1 is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-3(a) through (h) if the compressor meets the requirements specified in 40 CFR 60.482-3(i)(1) and (2). [40 CFR 60.482-3(i)], [Federally Enforceable Through Title V]

42. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)], [Federally Enforceable Through Title V]

43. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)], [Federally Enforceable Through Title V]

44. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)], [Federally Enforceable Through Title V]

45. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)], [Federally Enforceable Through Title V]

46. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)], [Federally Enforceable Through Title V]

47. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)], [Federally Enforceable Through Title V]

48. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)], [Federally Enforceable Through Title V]

49. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)], [Federally Enforceable Through Title V]

50. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)], [Federally Enforceable Through Title V]

51. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)], [Federally Enforceable Through Title V]

52. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)], [Federally Enforceable Through Title V]

53. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)], [Federally Enforceable Through Title V]

54. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)], [Federally Enforceable Through Title V]

55. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)], [Federally Enforceable Through Title V]

56. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)], [Federally Enforceable Through Title V]

57. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)], [Federally Enforceable Through Title V]

58. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)], [Federally Enforceable Through Title V]

59. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)], [Federally Enforceable Through Title V]

60. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)], [Federally Enforceable Through Title V]

61. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)], [Federally Enforceable Through Title V]

62. Flares used to comply with Subpart GGG shall comply with the requirements of 40 CFR 60.18. [40 CFR 60.482-10(d)], [Federally Enforceable Through Title V]

63. Owners or operators of control devices used to comply with the provisions of Subpart GGG shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10(e)], [Federally Enforceable Through Title V]

64. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)], [Federally Enforceable Through Title V]

65. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)], [Federally Enforceable Through Title V]

66. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)], [Federally Enforceable Through Title V]

67. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)], [Federally Enforceable Through Title V]

68. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)], [Federally Enforceable Through Title V]

69. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)], [Federally Enforceable Through Title V]

70. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)], [Federally Enforceable Through Title V]

71. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)], [Federally Enforceable Through Title V]

72. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)], [Federally Enforceable Through Title V]

73. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)], [Federally Enforceable Through Title V]

74. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)], [Federally Enforceable Through Title V]

75. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)], [Federally Enforceable Through Title V]

76. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)], [Federally Enforceable Through Title V]

77. The owner or operator shall determine compliance with the standards of flares as specified in 40 CFR 60.485(g)(1), (2), (3), (4), (5), (6), and (7). [40 CFR 60.485(g)], [Federally Enforceable Through Title V]

78. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)], [Federally Enforceable Through Title V]

79. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)], [Federally Enforceable Through Title V]

80. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000'' if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

81. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)], [Federally Enforceable Through Title V]

82. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)], [Federally Enforceable Through Title V]

83. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)], [Federally Enforceable Through Title V]

84. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)], [Federally Enforceable Through Title V]

85. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)], [Federally Enforceable Through Title V]

86. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)], [Federally Enforceable Through Title V]

87. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)], [Federally Enforceable Through Title V]

88. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [District 40 CFR 60.486(k)], [Federally Enforceable Through Title V]

89. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)], [Federally Enforceable Through Title V]

90. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)], [Federally Enforceable Through Title V]

91. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)], [Federally Enforceable Through Title V]

92. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)], [Federally Enforceable Through Title V]

93. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)], [Federally Enforceable Through Title V]

94. Any existing reciprocating compressor that becomes an affected facility under provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h) provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h). [40 CFR 60.593(c)], [Federally Enforceable Through Title V]

95. An owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)], [Federally Enforceable Through Title V]

96. Pumps in light liquid service and valves in gas/vapor and light liquid service within a procesic compounds of usually high molecular weight that consist of many repeated links, each link being a relatively light and simple molecule. [40 CFR 60.593(e)], [Federally Enforceable Through Title V]

97. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)], [Federally Enforceable Through Title V]

98. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

99. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

100. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart GGG. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-6-4 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
CLAUS SULFUR RECOVERY UNIT INCLUDING CATALYTIC REACTOR OXYGEN ENRICHMENT SYSTEM, TAIL GAS TREATING UNIT WITH AMINE REGENERATION AND TAIL GAS INCINERATOR

PERMIT UNIT REQUIREMENTS

1. Oxygen enrichment system shall include liquid oxygen storage tank, vaporizer, flow ratio controller, sparger and analyzer. [District NSR Rule], [Federally Enforceable Through Title V]
2. Tail gas incinerator shall be equipped with 2.6 MM Btu/hr John Zinc DB O-14 gas fired burner, waste gas flowmeter, stack gas temperature indicator and O2 and SO2 monitoring system. [District NSR Rule], [Federally Enforceable Through Title V]
3. CO/CO2 monitor and/or O2 monitor shall be located upstream of the TGTU. CO/CO2 monitor and/or O2 monitor are only required to be operated during periods of SRU startup and shutdown. [District NSR Rule], [Federally Enforceable Through Title V]
4. All off-gas from tail gas unit quench tower (V-436), amine absorber (V-427) and amine stripper overhead accumulator (V-439) shall be processed in sulfur recovery unit except during breakdown conditions pursuant to Rule 1100. [District NSR Rule], [Federally Enforceable Through Title V]
5. Sulfur seal pots and sulfur sump shall vent only to tail gas treating unit or tail gas incinerator. [District NSR Rule], [Federally Enforceable Through Title V]
6. Waste gas shall not be disposed of in flare system (S-34-11) except during breakdown conditions pursuant to Rule 1100 (Amended December 12, 1992). [District NSR Rule], [Federally Enforceable Through Title V]
7. Shutdown is defined as the period beginning with the termination of acid gas feed and the initiation of natural gas or treated refinery fuel gas feed (for the purpose of heat stripping sulfur from the internal surfaces of the SRU). Shutdown ends when the SOx (as SO2) emission rate from incinerator does not exceed 250 ppmv @ 0% O2 (one hour average). [District NSR Rule], [Federally Enforceable Through Title V]
8. Warm standby is defined as the period between shutdown and startup when the SRU feed is solely natural gas or treated refinery fuel gas. [District NSR Rule], [Federally Enforceable Through Title V]
9. Startup is defined as the period beginning with the introduction (or increased utilization) of natural or treated refinery gas to the SRU to raise the temperature of the catalytic reactors to operating temperature (approximately 350 degrees F). Startup ends when the SOx (as SO2) emission rate from incinerator does not exceed 250 ppmv @ 0% O2 (one hour average). [District NSR Rule], [Federally Enforceable Through Title V]
10. During SRU shutdown, SRU tail gas shall be directed to the TGTU provided the O2 content of the SRU tail gas is less than or equal to 0.5% by weight as measured with portable O2 analyzer or equivalent CO value as measured by the CO/CO2 analyzer. During such periods TGTU tail gas shall be directed to the amine system. During the final 12 hours of SRU shutdown, the SRU tail gas may bypass the TGTU and be introduced directly to the incinerator. [District NSR Rule], [Federally Enforceable Through Title V]
11. During SRU warm standby, SRU tail gas may bypass the TGTU and be introduced directly to the incinerator. [District NSR Rule], [Federally Enforceable Through Title V]
12. During SRU startup (after being completely down), SRU tail gas may bypass the TGTU and be introduced directly to the incinerator provided the O2 content of the SRU tail is greater than 0.5% by volume as measured with portable O2 analyzer or equivalent CO value as measured by the CO/CO2 analyzer. The duration in which the TGTU is bypassed shall not exceed 36 hours. [District NSR Rule], [Federally Enforceable Through Title V]
13. During SRU startup (after being in warm standby), SRU tail gas shall be directed to the TGTU. Within 24 hours of directing the SRU tail gas to the TGTU, the SOx (as SO2) emission rate from incinerator shall not exceed 250 ppmv @ 0% O2 (one hour average). [District NSR Rule], [Federally Enforceable Through Title V]
14. There shall be no more than four startups and four shutdowns occurences for SRU #2 during any calendar year. [District NSR Rule], [Federally Enforceable Through Title V]
15. This unit is included in the specific limiting condition emission limit listed in the facility wide requirements. [District NSR Rule], [Federally Enforceable Through Title V]

16. Permittee shall maintain the following daily records: fuel type and amount used, permitted emissions factors and daily emissions for each air contaminant emitted. [District NSR Rule], [Federally Enforceable Through Title V]

17. Records required by this permit shall be retained on site for a period of at least five (5) years and shall be made readily available for District inspection upon request. [District NSR Rule and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

18. Permittee shall meet all applicable requirements of NSPS Subparts A and J. [District Rule 4001], [Federally Enforceable Through Title V]

19. All sampling connections, open-ended valves or lines shall be equipped with two closed valves or be capped with blind flanges or threaded plugs except during actual use. [District Rule 4001], [Federally Enforceable Through Title V]

20. The permittee shall, at all times including periods of startup, shutdown, and malfunction, maintain and operate the SRU and associated control equipment in a manner consistent with good air pollution control practice for minimizing emissions pursuant to NSPS Subpart A, 60.11 (d). [District Rule 4001], [Federally Enforceable Through Title V]

21. Sulfur dioxide emission concentration from sulfur recovery unit shall not exceed 250 ppmv at 0% O2 over a 12-hour rolling average. [40 CFR 60.104(a)(2) and 60.105(e)(4)], [Federally Enforceable Through Title V]

22. Sulfur compound emissions from incinerator shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407], [Federally Enforceable Through Title V]

23. When sour gas is flared and odor complaints are received, the District may request further reductions in operations necessary to reduce the flaring of sour gas. [District Rule 4102]

24. For any periods for which sulfur dioxide or oxides emissions data are not available, the operator shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability. [40 CFR 60.107(d)], [Federally Enforceable Through Title V]

25. A continuous emissions monitoring system shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60.105(a)(5). [40 CFR 60.105(a)(5)], [Federally Enforceable Through Title V]

26. For the purpose of NSPS reports under 40 CFR 60.7, periods of excess emissions that shall be determined and reported are defined as all 12-hour periods during which the average concentration of SO2 as measured by the SO2 continuous monitoring system exceeds 250 ppm (dry basis, 0% excess air). [District Rule 40 CFR 60.105 (e)(4)], [Federally Enforceable Through Title V]

27. Operator shall determine compliance using: Method 6 to determine the SO2 concentration; Method 15 to determine H2S concentration; and Method 3 or 3A to determine the oxygen concentration used to correct the emission rate for excess air. [40 CFR 60.106(f)], [Federally Enforceable Through Title V]

28. The owner or operator shall submit the reports required under this subpart to the District semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. The owner or operator shall submit a signed statement certifying the accuracy and completeness of the information contained in the report. [40 CFR 60.107(e) and 60.107(f)], [Federally Enforceable Through Title V]

29. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

30. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

31. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

32. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]

33. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]

34. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]

35. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]

36. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]

37. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

38. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

39. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

40. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

41. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

42. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

43. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

44. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

45. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

46. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

47. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

48. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

49. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

50. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

51. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

52. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1 & 4452, 6.2.1], [Federally Enforceable Through Title V]

53. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0], [Federally Enforceable Through Title V]

54. Particulate matter emissions shall not exceed in concentration at the point of discharge 0.1 gr/dscf. [District Rule 4201 and Kern Country Rule 404], [Federally Enforceable Through Title V]

55. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

56. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

57. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

PERMIT UNIT: S-34-7-4 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
SOUR WATER STRIPPING OPERATION WITH MISCELLANEOUS UTILITIES INCLUDING BACK-UP AMINE REGENERATOR (V-409), BOILER BLOWDOWN DRUM, WASTEWATER INJECTION WELL, AND MISCELLANEOUS PUMPS AND PIPING

PERMIT UNIT REQUIREMENTS

1. Amine regenerator off-gas shall be routed only to Area III sulfur recovery unit or vacuum vent gas absorber. [District NSR Rule], [Federally Enforceable Through Title V]
2. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
3. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
4. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
5. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]
6. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]
7. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]
8. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]
9. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]
10. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]
11. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]
12. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

13. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

14. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

15. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

16. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

17. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

18. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

19. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

20. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

21. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

22. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

23. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

24. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

25. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1 & 4452, 6.2.1], [Federally Enforceable Through Title V]

26. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0], [Federally Enforceable Through Title V]

27. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so, the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)], [Federally Enforceable Through Title V]

28. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)], [Federally Enforceable Through Title V]

29. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)], [Federally Enforceable Through Title V]

30. Each PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)], [Federally Enforceable Through Title V]

31. Any PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)], [Federally Enforceable Through Title V]

32. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)], [Federally Enforceable Through Title V]

33. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)], [Federally Enforceable Through Title V]

34. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 60.482-2(a)(2) and (d)(4) and the daily requirements of 40 CFR 60.482-2(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 60.482-2(h)], [Federally Enforceable Through Title V]

35. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)], [Federally Enforceable Through Title V]

36. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)], [Federally Enforceable Through Title V]

37. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)], [Federally Enforceable Through Title V]

38. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)], [Federally Enforceable Through Title V]

39. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)], [Federally Enforceable Through Title V]

40. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)], [Federally Enforceable Through Title V]

41. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)], [Federally Enforceable Through Title V]

42. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)], [Federally Enforceable Through Title V]

43. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)], [Federally Enforceable Through Title V]

44. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)], [Federally Enforceable Through Title V]

45. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)], [Federally Enforceable Through Title V]

46. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)], [Federally Enforceable Through Title V]

47. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)], [Federally Enforceable Through Title V]

48. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)], [Federally Enforceable Through Title V]

49. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)], [Federally Enforceable Through Title V]

50. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)], [Federally Enforceable Through Title V]

51. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)], [Federally Enforceable Through Title V]

52. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)], [Federally Enforceable Through Title V]

53. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)], [Federally Enforceable Through Title V]

54. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)], [Federally Enforceable Through Title V]

55. Flares used to comply with Subpart GGG shall comply with the requirements of 40 CFR 60.18. [40 CFR 60.482-10(d)], [Federally Enforceable Through Title V]

56. Owners or operators of control devices used to comply with the provisions of Subpart GGG shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10(e)], [Federally Enforceable Through Title V]

57. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)], [Federally Enforceable Through Title V]

58. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)], [Federally Enforceable Through Title V]

59. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)], [Federally Enforceable Through Title V]

60. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)], [Federally Enforceable Through Title V]

61. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)], [Federally Enforceable Through Title V]

62. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)], [Federally Enforceable Through Title V]

63. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)], [Federally Enforceable Through Title V]

64. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)], [Federally Enforceable Through Title V]

65. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)], [Federally Enforceable Through Title V]

66. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)], [Federally Enforceable Through Title V]

67. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)], [Federally Enforceable Through Title V]

68. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)], [Federally Enforceable Through Title V]

69. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)], [Federally Enforceable Through Title V]

70. The owner or operator shall determine compliance with the standards of flares as specified in 40 CFR 60.485(g)(1), (2), (3), (4), (5), (6), and (7). [40 CFR 60.485(g)], [Federally Enforceable Through Title V]

71. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)], [Federally Enforceable Through Title V]

72. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)], [Federally Enforceable Through Title V]

73. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000'' if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

74. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)], [Federally Enforceable Through Title V]

75. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)], [Federally Enforceable Through Title V]

76. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)], [Federally Enforceable Through Title V]

77. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)], [Federally Enforceable Through Title V]

78. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)], [Federally Enforceable Through Title V]

79. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)], [Federally Enforceable Through Title V]

80. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)], [Federally Enforceable Through Title V]

81. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [District 40 CFR 60.486(k)], [Federally Enforceable Through Title V]

82. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)], [Federally Enforceable Through Title V]

83. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)], [Federally Enforceable Through Title V]

84. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)], [Federally Enforceable Through Title V]

85. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)], [Federally Enforceable Through Title V]

86. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)], [Federally Enforceable Through Title V]

87. Any existing reciprocating compressor that becomes an affected facility under provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h) provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h). [40 CFR 60.593(c)], [Federally Enforceable Through Title V]

88. An owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)], [Federally Enforceable Through Title V]

89. Pumps in light liquid service and valves in gas/vapor and light liquid service within a procesic compounds of usually high molecular weight that consist of many repeated links, each link being a relatively light and simple molecule. [40 CFR 60.593(e)], [Federally Enforceable Through Title V]

90. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)], [Federally Enforceable Through Title V]

91. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

92. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

93. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-8-4 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
WASTEWATER TREATING UNIT INCL OIL WATER SEWER SYSTEM, WASTEWATER TANKS, CORRUGATED PLATE, OIL/WATER SEPARATORS, VAPOR RECOVERY COMPRESSORS, MISC FILTRATION DEVICES, PUMPS, HEAT EXCHANGERS, VESSELS, & INJECTION WELLS

PERMIT UNIT REQUIREMENTS

1. VOC stripping system shall include column, off-gas chiller and heater, condenser collector, two carbon adsorbers, nitrogen blower, cleaning solution collection tank, steam condenser and collection tank. [District NSR Rule], [Federally Enforceable Through Title V]
2. Operation shall include pre-injection surge tank T-915. [District NSR Rule], [Federally Enforceable Through Title V]
3. Tank T-914, oil water separators and wastewater multimedia filters shall vent only to vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]
4. Vapor control system shall be in use at all times, except during periods of maintenance and cleaning as allowed for below. [District NSR Rule], [Federally Enforceable Through Title V]
5. Upon reconnection to vapor control system, permittee shall demonstrate using a portable hydrocarbon monitor that all pressure relief valves and other fugitive components associated with the vessel being cleaned are leak free, as defined in Rule 4623. [District NSR Rule], [Federally Enforceable Through Title V]
6. Permittee shall keep a record of each period of cleaning and maintenance when the tank vapor control system is not in operation. [District NSR Rule], [Federally Enforceable Through Title V]
7. Off-gas from closed drain accumulators (V-914A/B) shall not be vented to the flare header except during breakdown conditions pursuant to Rule 1100. [District NSR Rule], [Federally Enforceable Through Title V]
8. Liquids from closed drain accumulators (V-914A/B) shall be pumped only to ejector discharge drum (V-201) or tanks connected to vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]
9. Effluent water shall be disposed of in the wastewater injection well or properly disposed off site. [District NSR Rule], [Federally Enforceable Through Title V]
10. Condensate resulting from carbon bed regeneration shall be handled in a manner preventing emissions to the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
11. Recovered oil shall be stored only in tanks connected to the tankage vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]
12. All sampling connections, open-ended valves or lines shall be equipped with two closed valves or be capped with blind flanges or threaded plugs except during actual use. [District Rule 4001], [Federally Enforceable Through Title V]
13. Tank may be disconnected from vapor control system during maintenance and cleaning periods provided liquids and vapors subject to Rule 4623 are completely removed and vapor lines are isolated. [District Rule 4623], [Federally Enforceable Through Title V]
14. Permittee shall receive written or faxed approval from the District Compliance division prior to tank vapor control system disconnection. [District Rule 4623], [Federally Enforceable Through Title V]
15. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
16. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
17. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

18. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]

19. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]

20. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]

21. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]

22. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]

23. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

24. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

25. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

26. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

27. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

28. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

29. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

30. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

31. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

32. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

33. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

34. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

35. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

36. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

37. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

38. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1 & 4452, 6.2.1], [Federally Enforceable Through Title V]

39. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0], [Federally Enforceable Through Title V]

40. A person shall not use any compartment of any vessel or device operated for the recovery of oil or tar from effluent water, from any equipment which processes, refines, stores or handles petroleum or coal tar products unless such compartments are equipped with one of the following vapor loss control devices, except when gauging or sampling is taking place: 1) A solid cover with all openings sealed and totally enclosing the liquid contents of the compartment, except for such breathing vents as are structurally necessary, 2) A floating pontoon or double-deck type cover, equipped with closure seals that have no holes or tears, installed and maintained so that gaps between the compartment wall and seal shall not exceed one-eighth (1/8) inch for an accumulative length of 97 percent of the perimeter of the tank, and shall not exceed one-half (1/2) inch for an accumulative length of the remaining three (3) percent of the perimeter of the tank. No gap between the compartment wall and the seal shall exceed one-half (1/2) inch, or 3) A vapor recovery system with a combined collection and control efficiency of at least 90 percent by weight. [District Rule 4625, 5.1], [Federally Enforceable Through Title V]

41. Any gauging and sampling device in the compartment cover shall be equipped with a cover or lid. The cover shall be in a closed position at all times, except when the device is in actual use. [District Rule 4625, 5.2], [Federally Enforceable Through Title V]

42. All wastewater separator forbays shall be covered. [District Rule 4625, 5.3], [Federally Enforceable Through Title V]

43. Skimmed oil or tar removed from wastewater separating devices shall be either charged to process units with feed or transferred to a container with a control system with at least 90 percent control efficiency by weight. [District Rule 4625, 5.4], [Federally Enforceable Through Title V]

44. Efficiency of VOC control device shall be determined by EPA Test Method 25 and analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4625, 6.1.1], [Federally Enforceable Through Title V]

45. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

46. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

47. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-9-4 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
29.3 MMBTU/HR NATURAL/REFINERY GAS-FIRED BOILER 81H10 WITH COEN LO-NOX BURNER

PERMIT UNIT REQUIREMENTS

1. Boiler shall meet all requirements of Rule 4001, New Source Performance Standards Subpart A - General Provisions and Subpart J - Standards of Performance for Petroleum Refineries (Amended April 14, 1999). [40 CFR 60.1 and 40 CRF 60.100], [Federally Enforceable Through Title V]
2. Fuel gas sulfur content (as H2S) shall not exceed 0.1 gr/ dscf (160 ppmv) over a three hour rolling average and shall be continuously monitored and recorded. [40 CFR 60.104(a)(1)], [Federally Enforceable Through Title V]
3. This unit shall be operated only as a replacement/emergency standby unit for no more than 720 hours/year and 9 billion Btu/year. [District Rules 4305 & 4351], [Federally Enforceable Through Title V]
4. Boiler must be tuned at least once each calendar year in which it operated in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedures for Boilers). [District Rule 4305], [Federally Enforceable Through Title V]
5. Permittee shall install and maintain a non-resettable totalizing mass or volumetric flow meter on the boiler fuel line. Volumetric flow measurements shall be periodically compensated for temperature and pressure. [District Rule 1070 and Rule 4351], [Federally Enforceable Through Title V]
6. This unit is included in the specific limiting condition emission limit listed in the facility wide requirements. [District NSR Rule], [Federally Enforceable Through Title V]
7. Permittee shall maintain the following daily records: fuel type and amount used, permitted emissions factors and daily emissions for each air contaminant emitted. [District NSR Rule], [Federally Enforceable Through Title V]
8. Permittee shall maintain records of fuel hhv, cumulative annual fuel use, annual hours of operation, and the primary unit for which this unit replaced. [District Rule 4351], [Federally Enforceable Through Title V]
9. H2S removal system and monitor shall meet the requirements of New Source Performance Standards Subpart J - Standards of Performance for Petroleum Refineries. [District Rule 4001 Subpart J], [Federally Enforceable Through Title V]
10. Permittee shall maintain records of the occurrence of and duration of any startup, shutdown, or malfunction in the operation of the boiler, or any malfunction of the air pollution control equipment. [District Rule 4001 Subpart J], [Federally Enforceable Through Title V]
11. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081, and County Rule 108.1 (Kern)], [Federally Enforceable Through Title V]
12. Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
13. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
14. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
15. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

16. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

17. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2 and 4351, 6.2.1], [Federally Enforceable Through Title V]

18. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas not exceeding 0.5% sulfur by weight; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and Rule 4801], [Federally Enforceable Through Title V]

19. Owner/operator shall have boiler tuned at least once each calendar year in which it operates by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4305], [Federally Enforceable Through Title V]

20. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2], [Federally Enforceable Through Title V]

21. The owner or operator shall install an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in fuel gases before being burned in any fuel gas combustion device. The span value for this instrument is 425 mg/dscm H2S. The performance evaluations for this H2S monitor shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations. [40 CFR Part 60, Subpart J, 60.105(a)(4)(i)(iii)], [Federally Enforceable Through Title V]

22. Continuous emissions monitoring (CEM) results shall be calculated on a rolling three (3) hour average. [40 CFR 60.105(e)], [Federally Enforceable Through Title V]

23. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

24. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

25. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

26. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]

27. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]

28. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]

29. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]

30. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]

31. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

32. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

33. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

34. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

35. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

36. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

37. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

38. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

39. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

40. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

41. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

42. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

43. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

44. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

45. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

46. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1 & 4452, 6.2.1], [Federally Enforceable Through Title V]

47. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

48. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-10-4 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
29.3 MM BTU/HR NATURAL/REFINERY GAS-FIRED BOILER 81H11 WITH COEN LO-NOX BURNER

PERMIT UNIT REQUIREMENTS

1. Boiler shall meet all requirements of Rule 4001, New Source Performance Standards Subpart A - General Provisions and Subpart J - Standards of Performance for Petroleum Refineries (Amended April 14, 1999). [40 CFR 60.1 and 40CFR 60.100], [Federally Enforceable Through Title V]
2. Fuel gas sulfur content (as H2S) shall not exceed 0.1 gr/ dscf (160 ppmv) over a three hour rolling average and shall be continuously monitored and recorded. [40 CFR 60.104(a)(1)], [Federally Enforceable Through Title V]
3. This unit shall be operated only as a replacement/emergency standby unit for no more than 720 hours/year and 9 billion Btu/year. [District Rules 4305 & 4351], [Federally Enforceable Through Title V]
4. Boiler must be tuned at least once each calendar year in which it operated in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedures for Boilers). [District Rule 4305], [Federally Enforceable Through Title V]
5. Permittee shall install and maintain a non-resettable totalizing mass or volumetric flow meter on the boiler fuel line. Volumetric flow measurements shall be periodically compensated for temperature and pressure. [District Rule 1070 and Rule 4351], [Federally Enforceable Through Title V]
6. This unit is included in the specific limiting condition emission limit listed in the facility wide requirements. [District NSR Rule], [Federally Enforceable Through Title V]
7. Permittee shall maintain the following daily records: fuel type and amount used, permitted emissions factors and daily emissions for each air contaminant emitted. [District NSR Rule], [Federally Enforceable Through Title V]
8. Permittee shall maintain records of fuel hhv, cumulative annual fuel use, annual hours of operation, and the primary unit for which this unit replaced. [District Rule 4351], [Federally Enforceable Through Title V]
9. H2S removal system and monitor shall meet the requirements of New Source Performance Standards Subpart J - Standards of Performance for Petroleum Refineries. [District Rule 4001 Subpart J], [Federally Enforceable Through Title V]
10. Permittee shall maintain records of the occurrence of and duration of any startup, shutdown, or malfunction in the operation of the boiler, or any malfunction of the air pollution control equipment. [District Rule 4001 Subpart J], [Federally Enforceable Through Title V]
11. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081, and County Rule 108.1 (Kern)], [Federally Enforceable Through Title V]
12. Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
13. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
14. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
15. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

16. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

17. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2 and 4351, 6.2.1], [Federally Enforceable Through Title V]

18. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas not exceeding 0.5% sulfur by weight; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and Rule 4801], [Federally Enforceable Through Title V]

19. Owner/operator shall have boiler tuned at least once each calendar year in which it operates by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4305], [Federally Enforceable Through Title V]

20. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2], [Federally Enforceable Through Title V]

21. The owner or operator shall install an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in fuel gases before being burned in any fuel gas combustion device. The span value for this instrument is 425 mg/dscm H2S. The performance evaluations for this H2S monitor shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations. [40 CFR Part 60, Subpart J, 60.105(a)(4)(i)(iii)], [Federally Enforceable Through Title V]

22. Continuous emissions monitoring (CEM) results shall be calculated on a rolling three (3) hour average. [40 CFR 60.105(e)], [Federally Enforceable Through Title V]

23. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

24. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

25. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

26. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]

27. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]

28. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]

29. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]

30. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]

31. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

32. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

33. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

34. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

35. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

36. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

37. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

38. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

39. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

40. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

41. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

42. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

43. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

44. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

45. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

46. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1 & 4452, 6.2.1], [Federally Enforceable Through Title V]

47. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

48. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-11-4 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
FLARE INCLUDING WASTE GAS KNOCKOUT DRUM, STEAM INJECTED FLARE TIP WITH AUTOMATIC CONTROLS, SECONDARY CHEMICAL INJECTION H2S REMOVAL SYSTEM CONNECTED TO FLARE GAS SUPPLY LINE WITH MISC TANKS, PIPING, AND PRESSURE VESSELS

PERMIT UNIT REQUIREMENTS

1. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0], [Federally Enforceable Through Title V]
2. Operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 0.10 gr/dscf (230 mg/dscm). [40 CFR Part 60, subpart J, 60.105(e)(3)(ii)], [Federally Enforceable Through Title V]
3. Operator shall determine compliance with the H2S standard using EPA Method 11. [40 CFR Part 60, subpart J, 60.106(e)], [Federally Enforceable Through Title V]
4. Sulfur content (as H2S) of fuel gas, as defined in Rule 4001 Subpart J, burned in flare shall not exceed 0.10 gr/dscf. [40 CFR 60, Subpart J], [Federally Enforceable Through Title V]
5. Continuous emissions monitoring system shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [40 CFR 60, Subpart J], [Federally Enforceable Through Title V]
6. Flare gas bypass compressors shall be designated, as described in section 60.486(e) (1) and (2) for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. The reading shall be measured by the methods specified in section 60.485(c). Compressors shall be tested initially, annually thereafter, and at other times as requested by the District. [District Rule 4001, Subpart GGG], [Federally Enforceable Through Title V]
7. Flare pilot shall burn purchased natural gas or refinery fuel gas only. [District NSR Rule], [Federally Enforceable Through Title V]
8. All gas burned in flare, except pilot fuel gas, shall be measured by continuously recording flowmeter. [District NSR Rule], [Federally Enforceable Through Title V]
9. Permittee shall immediately notify the District of any change in manufacturer or formulation of scrubbing agents used at the secondary hydrogen sulfide (H2S) removal system, and shall submit MSDS for new scrubbing agent within one (1) week of change. [District NSR Rule], [Federally Enforceable Through Title V]
10. This unit is included in the specific limiting condition emission limit listed in the facility wide requirements. [District NSR Rule], [Federally Enforceable Through Title V]
11. Permittee shall maintain the following daily records: fuel type and amount used, permitted emissions factors and daily emissions for each air contaminant emitted. [District NSR Rule], [Federally Enforceable Through Title V]
12. Visible emissions monitoring shall be conducted at least annually, using EPA Method 22. [40CFR 60.18(f)(1)], [Federally Enforceable Through Title V]
13. The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311, 5.2 and 40CFR 60.18(c)(2)], [Federally Enforceable Through Title V]
14. The outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3 and 40CFR 60.18(f)(2)], [Federally Enforceable Through Title V]

15. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311, 5.4 and 40CFR 60.18(f)(2)], [Federally Enforceable Through Title V]

16. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5], [Federally Enforceable Through Title V]

17. Open flares in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311, 5.6], [Federally Enforceable Through Title V]

18. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 40CFR 60.18(d)], [Federally Enforceable Through Title V]

19. The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18 (f)(4)], [Federally Enforceable Through Title V]

20. Air-assisted or steam-assisted flares shall only be used when the net heating value of the gas being combusted is 300 Btu/scf or greater. Nonassisted flares shall only be used when the net heating value of the gas being combusted is 200 Btu/scf or greater. [40 CFR 60.18 (c)(3)(ii)], [Federally Enforceable Through Title V]

21. Steam-assisted and nonassisted flares shall be operated with an exit velocity less than 60 ft/sec, except as provided in 40 CFR 60.18 (c)(4)(ii) and (iii). [40 CFR 60.18 (c)(4)(i)], [Federally Enforceable Through Title V]

22. Steam-assisted and nonassisted flares may be operated with an exit velocity equal to or greater than 60 ft/sec, but less than 400 ft/sec, if the net heating value of the gas being combusted is greater than 1,000 Btu/scf. [40 CFR 60.18 (c)(4)(ii)], [Federally Enforceable Through Title V]

23. Steam-assisted and nonassisted flares may be operated with an exit velocity less than the velocity Vmax, as determined by the methods specified in 40 CFR 60.18 (f)(5), and less than 400 ft/sec. [40 CFR 60.18 (c)(4)(iii)], [Federally Enforceable Through Title V]

24. The net heating value of the gas being combusted the flare shall be calculated pursuant to 40 CFR 60.18(f)(3) or by using EPA Method 18, ASTM D1946, and ASTM D2382 if published values are not available or cannot be calculated. [40 CFR 60.18 (f)(3)], [Federally Enforceable Through Title V]

25. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

26. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

27. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

28. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]

29. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]

30. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]

31. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]

32. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]

33. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

34. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

35. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

36. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

37. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

38. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

39. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

40. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

41. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

42. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

43. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

44. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

45. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

46. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

47. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

48. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1 & 4452, 6.2.1], [Federally Enforceable Through Title V]

49. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

50. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-12-2 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
STEAM CONDENSATE & DEAERATION OPERATION INCLUDING BOILER FEEDWATER DEAERATOR (DA-900), BOILER FEEDWATER TREATING EQUIPMENT, 2 BOILER BLOWDOWN DRUMS (V-904/915), STEAM CONDENSATE PIPING SYSTEM, AND 3 CHEMICAL TOTE TANKS

PERMIT UNIT REQUIREMENTS

1. Amount of organic liquid loaded for all three tote tanks shall not exceed a total of 1,200 gallons in any one day. [District NSR Rule], [Federally Enforceable Through Title V]
2. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
3. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
4. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
5. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]
6. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]
7. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]
8. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]
9. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]
10. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]
11. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]
12. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

13. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

14. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

15. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

16. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

17. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

18. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

19. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

20. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

21. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

22. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

23. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

24. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

25. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1 & 4452, 6.2.1], [Federally Enforceable Through Title V]

26. Permittee shall maintain records of amount of liquid loaded into the tote tanks and the date the loading occurred. Records shall be kept for a period of five years and made readily available for District inspection upon request. [District Rule 1070 and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

27. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

28. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-13-3 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
150,000 BBL FIXED ROOF STORAGE TANK #T-900A WITH VAPOR RECOVERY SEPARATOR, COMPRESSOR, COMPRESSOR KNOCKOUT DRUM, AND PIPING TO REFINERY FUEL GAS SYSTEM

PERMIT UNIT REQUIREMENTS

1. When storing petroleum liquids (as defined in NSPS Subpart Ka), the permittee shall comply with all tank monitoring and reporting requirements of Rule 4001 (Amended April 14, 1999). [District Rule 4001 and 40 CFR, Sub Part Ka], [Federally Enforceable Through Title V]
2. The operator shall ensure that the vapor recovery system is functional and is operating as designed whenever emissions are being vented to it. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor control system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%, except for those periods described below when operation of the vapor control system is not required. [District Rule 4623 and 40 CFR 60.112a and District NSR Rule], [Federally Enforceable Through Title V]
4. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
5. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
6. Tank vapor control system shall be in use at all times, except when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, or when tank is undergoing maintenance or cleaning. [District NSR Rule], [Federally Enforceable Through Title V]
7. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, in accordance with methods described in Section 6.2 of District Rule 4623 (Amended December 17, 1992) [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 øF true vapor pressure shall be determined by Reid vapor pressure at 100 øF and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
9. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30ø, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
10. Tank may be disconnected from vapor control system during maintenance and cleaning periods provided liquids and vapors subject to Rule 4623 (Amended December 17, 1992) are completely removed and vapor lines are isolated. [District NSR Rule], [Federally Enforceable Through Title V]
11. Permittee shall receive written or faxed approval from the District Compliance division prior to tank vapor control system disconnection. [District NSR Rule], [Federally Enforceable Through Title V]
12. Upon reconnection to vapor control system, permittee shall demonstrate using a portable hydrocarbon monitor that all tank pressure relief valves and other fugitive components associated with the tank are leak free, as defined in Rule 4623 (Amended December 17, 1992). [District NSR Rule], [Federally Enforceable Through Title V]
13. Permittee shall keep a record of each period of storage when tank vapor control system is not in operation and of the initial boiling point or true vapor pressure of each organic liquid stored in the tank during such periods. [District NSR Rule], [Federally Enforceable Through Title V]
14. Collected vapors shall discharge only to refinery fuel gas or flare gas system. [District NSR Rule], [Federally Enforceable Through Title V]
15. Liquids collected in vapor control system shall be stored only in tanks served by tank vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]

16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling and for those periods described below when operation of the vapor control system is not required. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]

17. All tank openings and fittings shall remain gas tight (as defined by Rule 4623) during normal operation, except during gauging and sampling and for those periods described below when operation of the vapor control system is not required. [District Rule 4623], [Federally Enforceable Through Title V]

18. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]

19. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

20. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

22. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

23. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

25. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]

26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-14-3 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
150,000 BBL FIXED ROOF STORAGE TANK #T-900B WITH VAPOR RECOVERY SEPARATOR, COMPRESSOR, COMPRESSOR KNOCKOUT DRUM, AND PIPING TO REFINERY FUEL GAS SYSTEM

PERMIT UNIT REQUIREMENTS

1. When storing petroleum liquids (as defined in NSPS Subpart Ka), the permittee shall comply with all tank monitoring and reporting requirements of Rule 4001 (Amended April 14, 1999). [District Rule 4001 and 40 CFR, Sub Part Ka], [Federally Enforceable Through Title V]
2. The operator shall ensure that the vapor recovery system is functional and is operating as designed whenever emissions are being vented to it. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor control system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%, except for those periods described below when operation of the vapor control system is not required. [District Rule 4623 and 40 CFR 60.112a and District NSR Rule], [Federally Enforceable Through Title V]
4. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
5. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
6. Tank vapor control system shall be in use at all times, except when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, or when tank is undergoing maintenance or cleaning. [District NSR Rule], [Federally Enforceable Through Title V]
7. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, in accordance with methods described in Section 6.2 of District Rule 4623 (Amended December 17, 1992) [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 øF true vapor pressure shall be determined by Reid vapor pressure at 100 øF and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
9. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30ø, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
10. Tank may be disconnected from vapor control system during maintenance and cleaning periods provided liquids and vapors subject to Rule 4623 (Amended December 17, 1992) are completely removed and vapor lines are isolated. [District NSR Rule], [Federally Enforceable Through Title V]
11. Permittee shall receive written or faxed approval from the District Compliance division prior to tank vapor control system disconnection. [District NSR Rule], [Federally Enforceable Through Title V]
12. Upon reconnection to vapor control system, permittee shall demonstrate using a portable hydrocarbon monitor that all tank pressure relief valves and other fugitive components associated with the tank are leak free, as defined in Rule 4623 (Amended December 17, 1992). [District NSR Rule], [Federally Enforceable Through Title V]
13. Permittee shall keep a record of each period of storage when tank vapor control system is not in operation and of the initial boiling point or true vapor pressure of each organic liquid stored in the tank during such periods. [District NSR Rule], [Federally Enforceable Through Title V]
14. Collected vapors shall discharge only to refinery fuel gas or flare gas system. [District NSR Rule], [Federally Enforceable Through Title V]
15. Liquids collected in vapor control system shall be stored only in tanks served by tank vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]

16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling and for those periods described below when operation of the vapor control system is not required. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]

17. All tank openings and fittings shall remain gas tight (as defined by Rule 4623) during normal operation, except during gauging and sampling and for those periods described below when operation of the vapor control system is not required. [District Rule 4623], [Federally Enforceable Through Title V]

18. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]

19. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

20. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

22. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

23. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

25. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]

26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-15-3 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
10,000 BBL FIXED ROOF STORAGE TANK #T-901 WITH VAPOR RECOVERY SEPARATOR, COMPRESSOR, COMPRESSOR KNOCKOUT DRUM AND PIPING TO REFINERY FUEL GAS SYSTEM

PERMIT UNIT REQUIREMENTS

1. When storing petroleum liquids (as defined in NSPS Subpart Ka), the permittee shall comply with all tank monitoring and reporting requirements of Rule 4001 (Amended April 14, 1999). [District Rule 4001 and 40 CFR, Sub Part Ka], [Federally Enforceable Through Title V]
2. The operator shall ensure that the vapor recovery system is functional and is operating as designed whenever emissions are being vented to it. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor control system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%, except for those periods described below when operation of the vapor control system is not required. [District Rule 4623 and 40 CFR 60.112a and District NSR Rule], [Federally Enforceable Through Title V]
4. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
5. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
6. Tank vapor control system shall be in use at all times, except when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, or when tank is undergoing maintenance or cleaning. [District NSR Rule], [Federally Enforceable Through Title V]
7. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, in accordance with methods described in Section 6.2 of District Rule 4623 (Amended December 17, 1992) [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 øF true vapor pressure shall be determined by Reid vapor pressure at 100 øF and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
9. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30ø, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
10. Tank may be disconnected from vapor control system during maintenance and cleaning periods provided liquids and vapors subject to Rule 4623 (Amended December 17, 1992) are completely removed and vapor lines are isolated. [District NSR Rule], [Federally Enforceable Through Title V]
11. Permittee shall receive written or faxed approval from the District Compliance division prior to tank vapor control system disconnection. [District NSR Rule], [Federally Enforceable Through Title V]
12. Upon reconnection to vapor control system, permittee shall demonstrate using a portable hydrocarbon monitor that all tank pressure relief valves and other fugitive components associated with the tank are leak free, as defined in Rule 4623 (Amended December 17, 1992). [District NSR Rule], [Federally Enforceable Through Title V]
13. Permittee shall keep a record of each period of storage when tank vapor control system is not in operation and of the initial boiling point or true vapor pressure of each organic liquid stored in the tank during such periods. [District NSR Rule], [Federally Enforceable Through Title V]
14. Collected vapors shall discharge only to refinery fuel gas or flare gas system. [District NSR Rule], [Federally Enforceable Through Title V]
15. Liquids collected in vapor control system shall be stored only in tanks served by tank vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]

16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling and for those periods described below when operation of the vapor control system is not required. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]

17. All tank openings and fittings shall remain gas tight (as defined by Rule 4623) during normal operation, except during gauging and sampling and for those periods described below when operation of the vapor control system is not required. [District Rule 4623], [Federally Enforceable Through Title V]

18. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]

19. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

20. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

22. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

23. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

25. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]

26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-16-3 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
2,000 BBL FIXED ROOF STORAGE TANK #T-909A WITH VAPOR RECOVERY SEPARATOR, COMPRESSOR, COMPRESSOR KNOCKOUT DRUM AND PIPING TO REFINERY FUEL GAS SYSTEM

PERMIT UNIT REQUIREMENTS

1. When storing petroleum liquids (as defined in NSPS Subpart Ka), the permittee shall comply with all tank monitoring and reporting requirements of Rule 4001 (Amended April 14, 1999). [District Rule 4001 and 40 CFR, Sub Part Ka], [Federally Enforceable Through Title V]
2. The operator shall ensure that the vapor recovery system is functional and is operating as designed whenever emissions are being vented to it. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor control system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%, except for those periods described below when operation of the vapor control system is not required. [District Rule 4623 and 40 CFR 60.112a and District NSR Rule], [Federally Enforceable Through Title V]
4. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
5. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
6. Tank vapor control system shall be in use at all times, except when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, or when tank is undergoing maintenance or cleaning. [District NSR Rule], [Federally Enforceable Through Title V]
7. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, in accordance with methods described in Section 6.2 of District Rule 4623 (Amended December 17, 1992) [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 øF true vapor pressure shall be determined by Reid vapor pressure at 100 øF and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
9. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30ø, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
10. Tank may be disconnected from vapor control system during maintenance and cleaning periods provided liquids and vapors subject to Rule 4623 (Amended December 17, 1992) are completely removed and vapor lines are isolated. [District NSR Rule], [Federally Enforceable Through Title V]
11. Permittee shall receive written or faxed approval from the District Compliance division prior to tank vapor control system disconnection. [District NSR Rule], [Federally Enforceable Through Title V]
12. Upon reconnection to vapor control system, permittee shall demonstrate using a portable hydrocarbon monitor that all tank pressure relief valves and other fugitive components associated with the tank are leak free, as defined in Rule 4623 (Amended December 17, 1992). [District NSR Rule], [Federally Enforceable Through Title V]
13. Permittee shall keep a record of each period of storage when tank vapor control system is not in operation and of the initial boiling point or true vapor pressure of each organic liquid stored in the tank during such periods. [District NSR Rule], [Federally Enforceable Through Title V]
14. Collected vapors shall discharge only to refinery fuel gas or flare gas system. [District NSR Rule], [Federally Enforceable Through Title V]
15. Liquids collected in vapor control system shall be stored only in tanks served by tank vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]

16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling and for those periods described below when operation of the vapor control system is not required. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]

17. All tank openings and fittings shall remain gas tight (as defined by Rule 4623) during normal operation, except during gauging and sampling and for those periods described below when operation of the vapor control system is not required. [District Rule 4623], [Federally Enforceable Through Title V]

18. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]

19. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

20. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

22. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

23. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

25. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]

26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-17-3 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
2,000 BBL FIXED ROOF STORAGE TANK #T-909B WITH VAPOR RECOVERY SEPARATOR, COMPRESSOR, COMPRESSOR KNOCKOUT DRUM AND PIPING TO REFINERY FUEL GAS SYSTEM

PERMIT UNIT REQUIREMENTS

1. When storing petroleum liquids (as defined in NSPS Subpart Ka), the permittee shall comply with all tank monitoring and reporting requirements of Rule 4001 (Amended April 14, 1999). [District Rule 4001 and 40 CFR, Sub Part Ka], [Federally Enforceable Through Title V]
2. The operator shall ensure that the vapor recovery system is functional and is operating as designed whenever emissions are being vented to it. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor control system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%, except for those periods described below when operation of the vapor control system is not required. [District Rule 4623 and 40 CFR 60.112a and District NSR Rule], [Federally Enforceable Through Title V]
4. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
5. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
6. Tank vapor control system shall be in use at all times, except when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, or when tank is undergoing maintenance or cleaning. [District NSR Rule], [Federally Enforceable Through Title V]
7. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, in accordance with methods described in Section 6.2 of District Rule 4623 (Amended December 17, 1992) [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 øF true vapor pressure shall be determined by Reid vapor pressure at 100 øF and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
9. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30ø, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
10. Tank may be disconnected from vapor control system during maintenance and cleaning periods provided liquids and vapors subject to Rule 4623 (Amended December 17, 1992) are completely removed and vapor lines are isolated. [District NSR Rule], [Federally Enforceable Through Title V]
11. Permittee shall receive written or faxed approval from the District Compliance division prior to tank vapor control system disconnection. [District NSR Rule], [Federally Enforceable Through Title V]
12. Upon reconnection to vapor control system, permittee shall demonstrate using a portable hydrocarbon monitor that all tank pressure relief valves and other fugitive components associated with the tank are leak free, as defined in Rule 4623 (Amended December 17, 1992). [District NSR Rule], [Federally Enforceable Through Title V]
13. Permittee shall keep a record of each period of storage when tank vapor control system is not in operation and of the initial boiling point or true vapor pressure of each organic liquid stored in the tank during such periods. [District NSR Rule], [Federally Enforceable Through Title V]
14. Collected vapors shall discharge only to refinery fuel gas or flare gas system. [District NSR Rule], [Federally Enforceable Through Title V]
15. Liquids collected in vapor control system shall be stored only in tanks served by tank vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]

16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling and for those periods described below when operation of the vapor control system is not required. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]

17. All tank openings and fittings shall remain gas tight (as defined by Rule 4623) during normal operation, except during gauging and sampling and for those periods described below when operation of the vapor control system is not required. [District Rule 4623], [Federally Enforceable Through Title V]

18. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]

19. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

20. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

22. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

23. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

25. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]

26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-18-3 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
100,000 BBL FIXED ROOF STORAGE TANK #T-912A WITH VAPOR RECOVERY SEPARATOR, COMPRESSOR, COMPRESSOR KNOCKOUT VESSEL AND PIPING TO REFINERY FUEL GAS SYSTEM

PERMIT UNIT REQUIREMENTS

1. When storing petroleum liquids (as defined in NSPS Subpart Ka), the permittee shall comply with all tank monitoring and reporting requirements of Rule 4001 (Amended April 14, 1999). [District Rule 4001 and 40 CFR, Sub Part Ka], [Federally Enforceable Through Title V]
2. The operator shall ensure that the vapor recovery system is functional and is operating as designed whenever emissions are being vented to it. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor control system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%, except for those periods described below when operation of the vapor control system is not required. [District Rule 4623 and 40 CFR 60.112a and District NSR Rule], [Federally Enforceable Through Title V]
4. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
5. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
6. Tank vapor control system shall be in use at all times, except when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, or when tank is undergoing maintenance or cleaning. [District NSR Rule], [Federally Enforceable Through Title V]
7. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, in accordance with methods described in Section 6.2 of District Rule 4623 (Amended December 17, 1992) [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 øF true vapor pressure shall be determined by Reid vapor pressure at 100 øF and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
9. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30ø, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
10. Tank may be disconnected from vapor control system during maintenance and cleaning periods provided liquids and vapors subject to Rule 4623 (Amended December 17, 1992) are completely removed and vapor lines are isolated. [District NSR Rule], [Federally Enforceable Through Title V]
11. Permittee shall receive written or faxed approval from the District Compliance division prior to tank vapor control system disconnection. [District NSR Rule], [Federally Enforceable Through Title V]
12. Upon reconnection to vapor control system, permittee shall demonstrate using a portable hydrocarbon monitor that all tank pressure relief valves and other fugitive components associated with the tank are leak free, as defined in Rule 4623 (Amended December 17, 1992). [District NSR Rule], [Federally Enforceable Through Title V]
13. Permittee shall keep a record of each period of storage when tank vapor control system is not in operation and of the initial boiling point or true vapor pressure of each organic liquid stored in the tank during such periods. [District NSR Rule], [Federally Enforceable Through Title V]
14. Collected vapors shall discharge only to refinery fuel gas or flare gas system. [District NSR Rule], [Federally Enforceable Through Title V]
15. Liquids collected in vapor control system shall be stored only in tanks served by tank vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]

16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling and for those periods described below when operation of the vapor control system is not required. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]

17. All tank openings and fittings shall remain gas tight (as defined by Rule 4623) during normal operation, except during gauging and sampling and for those periods described below when operation of the vapor control system is not required. [District Rule 4623], [Federally Enforceable Through Title V]

18. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]

19. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

20. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

22. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

23. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

25. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]

26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-19-3 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
100,000 BBL FIXED ROOF STORAGE TANK #T-912B WITH VAPOR RECOVERY SEPARATOR, COMPRESSOR, COMPRESSOR KNOCKOUT DRUM AND PIPING TO REFINERY FUEL GAS SYSTEM

PERMIT UNIT REQUIREMENTS

1. When storing petroleum liquids (as defined in NSPS Subpart Ka), the permittee shall comply with all tank monitoring and reporting requirements of Rule 4001 (Amended April 14, 1999). [District Rule 4001 and 40 CFR, Sub Part Ka], [Federally Enforceable Through Title V]
2. The operator shall ensure that the vapor recovery system is functional and is operating as designed whenever emissions are being vented to it. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor control system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%, except for those periods described below when operation of the vapor control system is not required. [District Rule 4623 and 40 CFR 60.112a and District NSR Rule], [Federally Enforceable Through Title V]
4. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
5. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
6. Tank vapor control system shall be in use at all times, except when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, or when tank is undergoing maintenance or cleaning. [District NSR Rule], [Federally Enforceable Through Title V]
7. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, in accordance with methods described in Section 6.2 of District Rule 4623 (Amended December 17, 1992) [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 øF true vapor pressure shall be determined by Reid vapor pressure at 100 øF and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
9. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30ø, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
10. Tank may be disconnected from vapor control system during maintenance and cleaning periods provided liquids and vapors subject to Rule 4623 (Amended December 17, 1992) are completely removed and vapor lines are isolated. [District NSR Rule], [Federally Enforceable Through Title V]
11. Permittee shall receive written or faxed approval from the District Compliance division prior to tank vapor control system disconnection. [District NSR Rule], [Federally Enforceable Through Title V]
12. Upon reconnection to vapor control system, permittee shall demonstrate using a portable hydrocarbon monitor that all tank pressure relief valves and other fugitive components associated with the tank are leak free, as defined in Rule 4623 (Amended December 17, 1992). [District NSR Rule], [Federally Enforceable Through Title V]
13. Permittee shall keep a record of each period of storage when tank vapor control system is not in operation and of the initial boiling point or true vapor pressure of each organic liquid stored in the tank during such periods. [District NSR Rule], [Federally Enforceable Through Title V]
14. Collected vapors shall discharge only to refinery fuel gas or flare gas system. [District NSR Rule], [Federally Enforceable Through Title V]
15. Liquids collected in vapor control system shall be stored only in tanks served by tank vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]

16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling and for those periods described below when operation of the vapor control system is not required. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]

17. All tank openings and fittings shall remain gas tight (as defined by Rule 4623) during normal operation, except during gauging and sampling and for those periods described below when operation of the vapor control system is not required. [District Rule 4623], [Federally Enforceable Through Title V]

18. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]

19. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

20. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

22. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

23. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

25. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]

26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-20-6 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
COKE HANDLING OPERATION INCLUDING 2 PRIMARY AND SECONDARY CRUSHERS, GRIZZLY, 2 DEWATERING SCREENS, COKE SLUICEWAY, 2 COKE SLURRY SETTLING TANKS, 2 COVERED STORAGE BUILDINGS, 2 OUTSIDE COKE STORAGE PADS (FOR A TOTAL OF 2 ACRES), 2 FIXED AND 7 PORTABLE CONVEYORS, 3 SKID-MOUNTED COKE LOADER HOPPERS CONSISTING OF 2 PORTABLE CONVEYORS (1 WITH 2 CONVEYOR BELTS) WITH DISCHARGE CHUTES AND 1 STATIONARY CONVEYOR WITH DISCHARGE CHUTE, AND MISCELLANEOUS SCREENS, PUMPS AND WATER TANKS

PERMIT UNIT REQUIREMENTS

1. Railroad hopper cars and trucks shall be washed or cleaned as necessary to prevent emissions during transport. [District NSR Rule], [Federally Enforceable Through Title V]
2. Amount of petroleum coke shipped shall not exceed 6,000 tons per day. [District NSR Rule], [Federally Enforceable Through Title V]
3. The coke moisture content shall be maintained such that visible emissions from all coke storage, handling, and loading operations does not exceed 5% opacity. [District NSR Rule], [Federally Enforceable Through Title V]
4. Visible emissions from haul roads and other roadways traversed by mobile equipment and/or motor vehicles shall not exceed 20% in opacity. [District NSR Rule], [Federally Enforceable Through Title V]
5. PM10 emission rate shall not exceed 7.1 lb/day. Compliance with the throughput and coke handling visible emission limit shall demonstrate compliance with the PM10 daily emission limit. [District NSR Rule], [Federally Enforceable Through Title V]
6. The permittee shall perform an annual visible emissions inspection and evaluation by an observer (as defined in Rule 4101), maintain records of results, and shall make such records readily available for District inspection upon request for a period of five years. [District NSR Rule], [Federally Enforceable Through Title V]
7. Permittee shall maintain daily records of amount (tons) of petroleum coke shipped and shall make such records readily available for District inspection upon request for a period of five years. [District NSR Rule], [Federally Enforceable Through Title V]
8. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
9. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
10. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
11. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]
12. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]
13. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]

14. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]

15. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]

16. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

17. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

18. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

19. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

20. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

21. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

22. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

23. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

24. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1], [Federally Enforceable Through Title V]

25. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

26. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-21-3 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
10,000 BBL FIXED ROOF STORAGE TANK #T-902 WITH VAPOR CONTROL

PERMIT UNIT REQUIREMENTS

1. When storing petroleum liquids (as defined in NSPS Subpart Ka), the permittee shall comply with all tank monitoring and reporting requirements of Rule 4001 (Amended April 14, 1999). [District Rule 4001 and 40 CFR, Sub Part Ka], [Federally Enforceable Through Title V]
2. The operator shall ensure that the vapor recovery system is functional and is operating as designed whenever emissions are being vented to it. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor control system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%, except for those periods described below when operation of the vapor control system is not required. [District Rule 4623 and 40 CFR 60.112a and District NSR Rule], [Federally Enforceable Through Title V]
4. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
5. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
6. Tank vapor control system shall be in use at all times, except when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, or when tank is undergoing maintenance or cleaning. [District NSR Rule], [Federally Enforceable Through Title V]
7. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, in accordance with methods described in Section 6.2 of District Rule 4623 (Amended December 17, 1992) [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 øF true vapor pressure shall be determined by Reid vapor pressure at 100 øF and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
9. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30ø, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
10. Tank may be disconnected from vapor control system during maintenance and cleaning periods provided liquids and vapors subject to Rule 4623 (Amended December 17, 1992) are completely removed and vapor lines are isolated. [District NSR Rule], [Federally Enforceable Through Title V]
11. Permittee shall receive written or faxed approval from the District Compliance division prior to tank vapor control system disconnection. [District NSR Rule], [Federally Enforceable Through Title V]
12. Upon reconnection to vapor control system, permittee shall demonstrate using a portable hydrocarbon monitor that all tank pressure relief valves and other fugitive components associated with the tank are leak free, as defined in Rule 4623 (Amended December 17, 1992). [District NSR Rule], [Federally Enforceable Through Title V]
13. Permittee shall keep a record of each period of storage when tank vapor control system is not in operation and of the initial boiling point or true vapor pressure of each organic liquid stored in the tank during such periods. [District NSR Rule], [Federally Enforceable Through Title V]
14. Collected vapors shall discharge only to refinery fuel gas or flare gas system. [District NSR Rule], [Federally Enforceable Through Title V]
15. Liquids collected in vapor control system shall be stored only in tanks served by tank vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]

16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling and for those periods described below when operation of the vapor control system is not required. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]

17. All tank openings and fittings shall remain gas tight (as defined by Rule 4623) during normal operation, except during gauging and sampling and for those periods described below when operation of the vapor control system is not required. [District Rule 4623], [Federally Enforceable Through Title V]

18. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]

19. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

20. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

22. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

23. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

25. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]

26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-22-3 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
10,000 BBL FIXED ROOF STORAGE TANK #T-911 WITH VAPOR CONTROL AND 4 HOSES FOR TRUCK UNLOADING

PERMIT UNIT REQUIREMENTS

1. When storing petroleum liquids (as defined in NSPS Subpart Ka), the permittee shall comply with all tank monitoring and reporting requirements of Rule 4001 (Amended April 14, 1999). [District Rule 4001 and 40 CFR, Sub Part Ka], [Federally Enforceable Through Title V]
2. The operator shall ensure that the vapor recovery system is functional and is operating as designed whenever emissions are being vented to it. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor control system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%, except for those periods described below when operation of the vapor control system is not required. [District Rule 4623 and 40 CFR 60.112a and District NSR Rule], [Federally Enforceable Through Title V]
4. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
5. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
6. Tank vapor control system shall be in use at all times, except when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, or when tank is undergoing maintenance or cleaning. [District NSR Rule], [Federally Enforceable Through Title V]
7. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, in accordance with methods described in Section 6.2 of District Rule 4623 (Amended December 17, 1992) [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 øF true vapor pressure shall be determined by Reid vapor pressure at 100 øF and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
9. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30ø, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
10. Tank may be disconnected from vapor control system during maintenance and cleaning periods provided liquids and vapors subject to Rule 4623 (Amended December 17, 1992) are completely removed and vapor lines are isolated. [District NSR Rule], [Federally Enforceable Through Title V]
11. Permittee shall receive written or faxed approval from the District Compliance division prior to tank vapor control system disconnection. [District NSR Rule], [Federally Enforceable Through Title V]
12. Upon reconnection to vapor control system, permittee shall demonstrate using a portable hydrocarbon monitor that all tank pressure relief valves and other fugitive components associated with the tank are leak free, as defined in Rule 4623 (Amended December 17, 1992). [District NSR Rule], [Federally Enforceable Through Title V]
13. Permittee shall keep a record of each period of storage when tank vapor control system is not in operation and of the initial boiling point or true vapor pressure of each organic liquid stored in the tank during such periods. [District NSR Rule], [Federally Enforceable Through Title V]
14. Collected vapors shall discharge only to refinery fuel gas or flare gas system. [District NSR Rule], [Federally Enforceable Through Title V]
15. Liquids collected in vapor control system shall be stored only in tanks served by tank vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]

16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling and for those periods described below when operation of the vapor control system is not required. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]

17. All tank openings and fittings shall remain gas tight (as defined by Rule 4623) during normal operation, except during gauging and sampling and for those periods described below when operation of the vapor control system is not required. [District Rule 4623], [Federally Enforceable Through Title V]

18. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]

19. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

20. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

22. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

23. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

25. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]

26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-23-2 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
10,000 BBL FIXED ROOF STORAGE TANK #T-910 WITH VAPOR CONTROL

PERMIT UNIT REQUIREMENTS

1. When storing petroleum liquids (as defined in NSPS Subpart Ka), the permittee shall comply with all tank monitoring and reporting requirements of Rule 4001 (Amended April 14, 1999). [District Rule 4001 and 40 CFR, Sub Part Ka], [Federally Enforceable Through Title V]
2. The operator shall ensure that the vapor recovery system is functional and is operating as designed whenever emissions are being vented to it. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor control system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%, except for those periods described below when operation of the vapor control system is not required. [District Rule 4623 and 40 CFR 60.112a and District NSR Rule], [Federally Enforceable Through Title V]
4. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
5. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
6. Tank vapor control system shall be in use at all times, except when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, or when tank is undergoing maintenance or cleaning. [District NSR Rule], [Federally Enforceable Through Title V]
7. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, in accordance with methods described in Section 6.2 of District Rule 4623 (Amended December 17, 1992) [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 øF true vapor pressure shall be determined by Reid vapor pressure at 100 øF and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
9. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30ø, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
10. Tank may be disconnected from vapor control system during maintenance and cleaning periods provided liquids and vapors subject to Rule 4623 (Amended December 17, 1992) are completely removed and vapor lines are isolated. [District NSR Rule], [Federally Enforceable Through Title V]
11. Permittee shall receive written or faxed approval from the District Compliance division prior to tank vapor control system disconnection. [District NSR Rule], [Federally Enforceable Through Title V]
12. Upon reconnection to vapor control system, permittee shall demonstrate using a portable hydrocarbon monitor that all tank pressure relief valves and other fugitive components associated with the tank are leak free, as defined in Rule 4623 (Amended December 17, 1992). [District NSR Rule], [Federally Enforceable Through Title V]
13. Permittee shall keep a record of each period of storage when tank vapor control system is not in operation and of the initial boiling point or true vapor pressure of each organic liquid stored in the tank during such periods. [District NSR Rule], [Federally Enforceable Through Title V]
14. Collected vapors shall discharge only to refinery fuel gas or flare gas system. [District NSR Rule], [Federally Enforceable Through Title V]
15. Liquids collected in vapor control system shall be stored only in tanks served by tank vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]

16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling and for those periods described below when operation of the vapor control system is not required. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]

17. All tank openings and fittings shall remain gas tight (as defined by Rule 4623) during normal operation, except during gauging and sampling and for those periods described below when operation of the vapor control system is not required. [District Rule 4623], [Federally Enforceable Through Title V]

18. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]

19. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

20. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

22. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

23. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

25. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]

26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-24-2 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
20,000 BBL FIXED ROOF STORAGE TANK #T-903 WITH VAPOR CONTROL

PERMIT UNIT REQUIREMENTS

1. When storing petroleum liquids (as defined in NSPS Subpart Ka), the permittee shall comply with all tank monitoring and reporting requirements of Rule 4001 (Amended April 14, 1999). [District Rule 4001 and 40 CFR, Sub Part Ka], [Federally Enforceable Through Title V]
2. The operator shall ensure that the vapor recovery system is functional and is operating as designed whenever emissions are being vented to it. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
3. The tank shall be equipped with a vapor control system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%, except for those periods described below when operation of the vapor control system is not required. [District Rule 4623 and 40 CFR 60.112a and District NSR Rule], [Federally Enforceable Through Title V]
4. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
5. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
6. Tank vapor control system shall be in use at all times, except when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, or when tank is undergoing maintenance or cleaning. [District NSR Rule], [Federally Enforceable Through Title V]
7. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank when tank is storing treated wastewater, firewater, liquids with a true vapor pressure less than 0.2 psia, liquids with an initial boiling point of 302 deg F or higher, in accordance with methods described in Section 6.2 of District Rule 4623 (Amended December 17, 1992) [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
8. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 øF true vapor pressure shall be determined by Reid vapor pressure at 100 øF and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
9. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30ø, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
10. Tank may be disconnected from vapor control system during maintenance and cleaning periods provided liquids and vapors subject to Rule 4623 (Amended December 17, 1992) are completely removed and vapor lines are isolated. [District NSR Rule], [Federally Enforceable Through Title V]
11. Permittee shall receive written or faxed approval from the District Compliance division prior to tank vapor control system disconnection. [District NSR Rule], [Federally Enforceable Through Title V]
12. Upon reconnection to vapor control system, permittee shall demonstrate using a portable hydrocarbon monitor that all tank pressure relief valves and other fugitive components associated with the tank are leak free, as defined in Rule 4623 (Amended December 17, 1992). [District NSR Rule], [Federally Enforceable Through Title V]
13. Permittee shall keep a record of each period of storage when tank vapor control system is not in operation and of the initial boiling point or true vapor pressure of each organic liquid stored in the tank during such periods. [District NSR Rule], [Federally Enforceable Through Title V]
14. Collected vapors shall discharge only to refinery fuel gas or flare gas system. [District NSR Rule], [Federally Enforceable Through Title V]
15. Liquids collected in vapor control system shall be stored only in tanks served by tank vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]

16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling and for those periods described below when operation of the vapor control system is not required. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]

17. All tank openings and fittings shall remain gas tight (as defined by Rule 4623) during normal operation, except during gauging and sampling and for those periods described below when operation of the vapor control system is not required. [District Rule 4623], [Federally Enforceable Through Title V]

18. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]

19. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

20. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

22. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

23. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

25. Operator shall keep a record of liquids stored in each container, and the storage temperature and Reid vapor pressure of such liquids. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]

26. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-25-3 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
LPG TRUCK LOADING OPERATION INCLUDING N2 PURGING GAS SUPPLY AND ODORANT STORAGE TANK WITH PRESSURE RELIEF VALVE VENTING TO FLARE WHEN TANK INTERNAL PRESSURE EXCEEDS 425 PSIG

PERMIT UNIT REQUIREMENTS

1. All vapor displaced from trucks shall be captured by vapor return hose. [District NSR Rule], [Federally Enforceable Through Title V]
2. No more than 32,700 gallons of LPG shall be loaded per day. Monitoring records of daily throughput shall be maintained to demonstrate compliance. [District NSR Rule], [Federally Enforceable Through Title V]
3. Operator shall maintain all records of required monitoring data and support information for inspection for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
4. Handling, storage and injection of odorant shall be performed in a manner preventing VOC emission to the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
5. No LPG shall be unloaded by this equipment. [District NSR Rule], [Federally Enforceable Through Title V]
6. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
7. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
8. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
9. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]
10. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]
11. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]
12. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]
13. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]
14. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

15. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

16. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

17. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

18. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

19. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

20. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

21. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

22. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

23. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

24. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

25. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

26. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

27. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

28. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

29. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1 & 4452, 6.2.1], [Federally Enforceable Through Title V]

30. Construction, reconstruction (as defined in District Rule 4001, amended January 19, 1995), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.5], [Federally Enforceable Through Title V]

31. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624, 6.2.1 and County Rules 412 (Fresno, Stanislaus, Merced, and San Joaquin), 413 (Kern, Kings, and Tulare), and 419 (Madera)], [Federally Enforceable Through Title V]

32. Operator shall ensure all required source testing conforms to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081, and Kern County Rule 108.1], [Federally Enforceable Through Title V]

33. During the loading of organic liquids, operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

34. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. [District Rule 4624, 5.4; and County Rules 412 (Fresno, Kings, Stanislaus, Merced, and San Joaquin), 413 (Kern and Tulare), and 419 (Merced)], [Federally Enforceable Through Title V]

35. VOC emissions from the vapor collection and control system shall be determined annually using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. [District Rule 4624, 6.2.2 and County Rules 412 (Fresno, Kings, Stanislaus, Merced, and San Joaquin), 413 (Kern and Tulare), and 419 (Merced)], [Federally Enforceable Through Title V]

36. All sampling connections, open-ended valves or lines shall be equipped with two closed valves or be capped with blind flanges or threaded plugs except during actual use. [District Rule 4001], [Federally Enforceable Through Title V]

37. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

38. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-26-3 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
HEAVY GAS OIL TRUCK LOADING OPERATION INCLUDING 4 LOADING HOSES WITH DRY BREAK COUPLERS

PERMIT UNIT REQUIREMENTS

1. Only heavy gas oil with a RVP less than 0.0006 psia shall be loaded. [District NSR Rule], [Federally Enforceable Through Title V]
2. No trucks shall be loaded which previously transported petroleum product with a RVP in excess of 0.00045 psia. [District NSR Rule], [Federally Enforceable Through Title V]
3. Vapor return hoses shall be connected during loading of truck. [District NSR Rule], [Federally Enforceable Through Title V]
4. Loading operation shall be performed in a manner preventing spillage of petroleum liquid. [District NSR Rule], [Federally Enforceable Through Title V]
5. Operator shall ensure all required source testing conforms to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081, and Kern County Rule 108.1], [Federally Enforceable Through Title V]
6. Permittee shall maintain accurate records of liquid type, vapor pressure (TVP or RVP), and amount of each liquid transferred. Such records shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
7. Operator shall maintain all records of required monitoring data and support information for inspection for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
8. During the unloading of delivery vehicles, operator shall perform and record the results of quarterly leak inspections of the loading and vapor collection equipment at each loading arm. If none of the components are found to be leaking during five consecutive quarterly inspections, the leak inspection frequency may be changed from quarterly to semiannual. However, if one or more of the components are found to leak during a semiannual inspection, the inspection frequency shall change back to quarterly. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be measured at a distance of one centimeter from the potential source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
9. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of quarterly drainage inspections at disconnect for each loading arm. If no excess drainage is found during five consecutive quarterly inspections, the drainage inspection frequency may be changed from quarterly to annual. However, if one or more excess drainage condition is found during an annual inspection, the inspection frequency shall change back to quarterly. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
10. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (including date each leak or excess drainage condition repaired), and E) inspector name and signature. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
12. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
13. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]
14. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

15. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]

16. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]

17. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]

18. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]

19. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]

20. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

21. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

22. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

23. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

24. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

25. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

26. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

27. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

28. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rule 4451, 6.2.1], [Federally Enforceable Through Title V]

29. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-27-2 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
STRAIGHT RUN HEAVY OIL TRUCK LOADING OPERATION INCLUDING 2 LOADING HOSES AND 2 VAPOR RECOVERY HOSES WITH DRY BREAK COUPLERS

PERMIT UNIT REQUIREMENTS

1. Loading operation shall be performed in a manner preventing spillage of petroleum liquid. [District NSR Rule], [Federally Enforceable Through Title V]
2. Only straight run heavy gas oil with RVP less than 2.8 psi @ 100 F shall be loaded by this equipment. [District NSR Rule], [Federally Enforceable Through Title V]
3. Vapor return hoses shall be connected to vapor condensation unit during unloading. [District NSR Rule], [Federally Enforceable Through Title V]
4. VOC emission rate from vapor condensation unit shall not exceed 3.4 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
5. Liquid condensation from vapor condensation unit shall be piped only to existing farm drainage system (V-914B) and wastewater equalization tank (T-914). [District NSR Rule], [Federally Enforceable Through Title V]
6. All volatile organic compound vapors displaced from truck during loading shall be processed in the vapor condensation unit only. [District NSR Rule], [Federally Enforceable Through Title V]
7. Permittee shall maintain accurate records of liquid type, vapor pressure (TVP or RVP), and amount of each liquid transferred. Such records shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
8. Operator shall ensure all required source testing conforms to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081, and Kern County Rule 108.1], [Federally Enforceable Through Title V]
9. Operator shall maintain all records of required monitoring data and support information for inspection for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
10. During the unloading of delivery vehicles, operator shall perform and record the results of quarterly leak inspections of the loading and vapor collection equipment at each loading arm. If none of the components are found to be leaking during five consecutive quarterly inspections, the leak inspection frequency may be changed from quarterly to semiannual. However, if one or more of the components are found to leak during a semiannual inspection, the inspection frequency shall change back to quarterly. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be measured at a distance of one centimeter from the potential source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
11. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of quarterly drainage inspections at disconnect for each loading arm. If no excess drainage is found during five consecutive quarterly inspections, the drainage inspection frequency may be changed from quarterly to annual. However, if one or more excess drainage condition is found during an annual inspection, the inspection frequency shall change back to quarterly. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
12. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
13. The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (including date each leak or excess drainage condition repaired), and E) inspector name and signature. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
14. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

15. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

16. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

17. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]

18. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]

19. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]

20. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]

21. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]

22. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

23. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

24. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

25. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

26. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

27. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

28. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

29. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

30. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

31. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

32. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

33. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

34. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

35. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

36. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

37. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1 & 4452, 6.2.1], [Federally Enforceable Through Title V]

38. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

39. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-28-1 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
305 BHP DIESEL FIRED I.C. ENGINE #88-P31-G SERVING FIREWATER PUMP

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201], [Federally Enforceable Through Title V]
2. The engine shall be operated as a standby engine as defined in Rule 4701 (Amended November 12, 1998). [District Rule 4701], [Federally Enforceable Through Title V]
3. The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance and testing purposes shall not exceed 200 hours per year. Engine shall not be used in conjunction with any voluntary utility demand reduction program. [District NSR Rule and District Rule 4701], [Federally Enforceable Through Title V]
4. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [District Rule 407 (Kern)], [Federally Enforceable Through Title V]
5. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
6. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. Sulfur compound emissions shall not exceed 0.2% by volume (2,000 ppmv), on a dry basis average over 15 consecutive minutes. [District Rule 4801 and District Rule 407 (Kern)], [Federally Enforceable Through Title V]
8. The permittee shall maintain all records of required monitoring data and support information, including but not limited to date, number of hours of emergency and non-emergency operation, and sulfur content of the diesel fuel used. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2520, Section 9.4.2 and District Rule 4701], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-29-1 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
305 BHP DIESEL FIRED I.C. ENGINE #88-P32-G SERVING FIREWATER PUMP

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201], [Federally Enforceable Through Title V]
2. The engine shall be operated as a standby engine as defined in Rule 4701 (Amended November 12, 1998). [District Rule 4701], [Federally Enforceable Through Title V]
3. The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance and testing purposes shall not exceed 200 hours per year. Engine shall not be used in conjunction with any voluntary utility demand reduction program. [District NSR Rule and District Rule 4701], [Federally Enforceable Through Title V]
4. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [District Rule 407 (Kern)], [Federally Enforceable Through Title V]
5. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
6. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. Sulfur compound emissions shall not exceed 0.2% by volume (2,000 ppmv), on a dry basis average over 15 consecutive minutes. [District Rule 4801 and District Rule 407 (Kern)], [Federally Enforceable Through Title V]
8. The permittee shall maintain all records of required monitoring data and support information, including but not limited to date, number of hours of emergency and non-emergency operation, and sulfur content of the diesel fuel used. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2520, Section 9.4.2 and District Rule 4701], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-33-1 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
1,000 GALLONS FIXED ROOF STORAGE TANK #35T402

PERMIT UNIT REQUIREMENTS

1. Operator shall keep a record of liquids stored in each container, storage temperature and the true vapor pressure of liquids stored to verify continued exemption from Rule 4623 (amended 12/17/92). [District Rule 2520, Section 9.3.2], [Federally Enforceable Through Title V]
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determination shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, Section 9.3.2], [Federally Enforceable Through Title V]
3. As used in this permit, "source or type of petroleum" shall mean petroleum liquid with similar characteristics. The operator shall maintain records of the API gravity of the petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, Section 9.3.2], [Federally Enforceable Through Title V]
4. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-37-2 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
443 BHP DIESEL FIRED CATERPILLAR EMERGENCY/STANDBY I.C. ENGINE WITH TURBOCHARGER, AFTERCOOLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING ELECTRICAL GENERATOR (NORTH, MODEL# 340GB DI, SERIAL# 4RGO1495)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201], [Federally Enforceable Through Title V]
2. The engine shall be operated as a standby engine as defined in Rule 4701 (Amended November 12, 1998). [District Rule 4701], [Federally Enforceable Through Title V]
3. The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance and testing purposes shall not exceed 200 hours per year. Engine shall not be used in conjunction with any voluntary utility demand reduction program. [District NSR Rule and District Rule 4701], [Federally Enforceable Through Title V]
4. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [District NSR Rule and District Rule 407 (Kern)], [Federally Enforceable Through Title V]
5. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
6. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. Sulfur compound emissions shall not exceed 0.2% by volume (2,000 ppmv), on a dry basis average over 15 consecutive minutes. [District Rule 4801 and District Rule 407 (Kern)], [Federally Enforceable Through Title V]
8. The engine shall be equipped with a non-resettable elapsed-time meter indicating total hours of operation. [District NSR Rule], [Federally Enforceable Through Title V]
9. The engine shall be operated with the timing retarded four degrees from the manufacturer's standard recommended timing. [District NSR Rule], [Federally Enforceable Through Title V]
10. The permittee shall maintain all records of required monitoring data and support information, including but not limited to date, number of hours of emergency and non-emergency operation, and sulfur content of the diesel fuel used. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2520, Section 9.4.2 and District Rule 4701], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-38-2 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
443 BHP DIESEL FIRED CATERPILLAR EMERGENCY/STANDBY I.C. ENGINE WITH TURBOCHARGER, AFTERCOOLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING ELECTRICAL GENERATOR (SOUTH, MODEL# 340GB DI, SERIAL# 4RGO1486)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201], [Federally Enforceable Through Title V]
2. The engine shall be operated as a standby engine as defined in Rule 4701 (Amended November 12, 1998). [District Rule 4701], [Federally Enforceable Through Title V]
3. The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance and testing purposes shall not exceed 200 hours per year. Engine shall not be used in conjunction with any voluntary utility demand reduction program. [District NSR Rule and District Rule 4701], [Federally Enforceable Through Title V]
4. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [District NSR Rule and District Rule 407 (Kern)], [Federally Enforceable Through Title V]
5. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
6. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. Sulfur compound emissions shall not exceed 0.2% by volume (2,000 ppmv), on a dry basis average over 15 consecutive minutes. [District Rule 4801 and District Rule 407 (Kern)], [Federally Enforceable Through Title V]
8. The engine shall be equipped with a non-resettable elapsed-time meter indicating total hours of operation. [District NSR Rule], [Federally Enforceable Through Title V]
9. The engine shall be operated with the timing retarded four degrees from the manufacturer's standard recommended timing. [District NSR Rule], [Federally Enforceable Through Title V]
10. The permittee shall maintain all records of required monitoring data and support information, including but not limited to date, number of hours of emergency and non-emergency operation, and sulfur content of the diesel fuel used. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2520, Section 9.4.2 and District Rule 4701], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-39-0 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
95.4 MMBTU/HR NATURAL GAS FIRED NEBRASKA BOILER WITH COEN LOW NOX BURNER MODEL DAF-36 AND FLUE GAS RECIRCULATION - CANCELED PER S-34-40-0 CONDITION 10, MSL, 7/11/97

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Natural gas burned shall be PUC quality. Refinery fuel gas shall not be burned. [ ]
3. Emission rate shall not exceed any of the following PM10: 0.014 lb/MMBtu, SOx: 0.0006 lb/MMBtu, NOx: 30 ppmvd @ 3% O2, VOC: 0.008 lb/MMBtu, or CO: 200 ppmvd @ 3% O2. [ ]
4. Emission rate from all units subject to SLC (facility S-34) shall not exceed any of the following PM10: 14.38 lb/hr, SOx: 25.00 lb/hr, NOx: 23.00 lb/hr, VOC: 15.00 lb/hr, or CO: 22.00 lb/hr. [ ]
5. Compliance with NOx and CO emission limits shall be demonstrated pursuant to Rules 4305 and 4351. [ ]
6. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
7. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-40-0 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
41.3 MMBTU/HR NATURAL GAS/TREATED REFINERY GAS FIRED ZURN BOILER WITH LOW NOX BURNER AND FLUE GAS RECIRCULATION - PERMIT CANCELLED PER APPLICANT LETTER DATED 9/3/98 (MSL, 9/21/98)

PERMIT UNIT REQUIREMENTS

1. Unit shall only be fired on PUC quality natural gas or treated refinery gas with a sulfur content less than 0.1 gr/dscf as H2S. [District Rule 2201]
2. Emission rate shall not exceed any of the following: PM10: 0.014 lb/MMBtu, NOx: 30 ppmvd @ 3% O2, VOC: 0.021 lb/MMBtu, or CO: 0.220 lb MMBtu. [District Rule 2201]
3. Compliance with NOx and CO emission concentration limits shall be demonstrated by District witnessed sampling by independent laboratory within 60 days of startup and not less than once every 12 months. [District Rule 4305]
4. Gaseous fuel fired units demonstrating compliance on two consecutive compliance source tests may defer the following source test for up to 36 months. [ ]
5. Source testing shall be conducted using methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [ ]
6. The unit shall either install and maintain continuous emission monitoring equipment for NOx, CO, and Oxygen as defined in Rule 1080, or shall install and maintain APCO approved alternative monitoring pursuant to section 5.4.2 of Rule 4305. [ ]
7. Permittee shall comply with all applicable provisions of New Source Performance Standards subpart J. [ ]

San Joaquin Valley
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PERMIT UNIT: S-34-41-1 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
1,200 GALLON FIXED ROOF PETROLEUM STORAGE "DEGREASER" TANK

PERMIT UNIT REQUIREMENTS

1. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.6.3], [Federally Enforceable Through Title V]

2. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

3. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

4. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

5. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

6. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

7. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

8. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

9. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

10. Operator shall keep a record of liquids stored in each container, storage temperature and the Reid vapor pressure of such liquids. [District Rule 4623, 6.3], [Federally Enforceable Through Title V]

11. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]

12. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-42-4 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
98 MMBTU/HR NATURAL/REFINERY GAS FIRED BOILER (BOILER PLATE 84.8 MMBTU/HR)(81-H12) WITH TODD ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. Fuel gas sulfur content (as H2S) shall not exceed 0.1 gr/ dscf (160 ppmv) over a three hour rolling average and shall be continuously monitored and recorded. [40 CFR 60.104(a)(1)], [Federally Enforceable Through Title V]
2. Emission rate shall not exceed any of the following: PM10: 0.014 lb/MMBtu, NOx: 0.036 lb/MM Btu or 30 ppmvd @ 3% O2, VOC: 0.041 lb/MMBtu, or CO: 200 ppmvd @ 3% O2. [District NSR Rule, and District Rule 4305, & 4351], [Federally Enforceable Through Title V]
3. Permittee shall comply with Rule 4001, Subpart A and J. [District Rule 4001], [Federally Enforceable Through Title V]
4. The stack concentration of NOx (as NO2), CO, and O2 shall be measured at least on a monthly basis using District approved portable analyzers. [District Rule 4305], [Federally Enforceable Through Title V]
5. The permittee shall maintain records of the date and time of NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. These records shall be retained at the facility for a period of no less than five years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4305], [Federally Enforceable Through Title V]
6. If the NOx and/or CO concentrations, as measured by the portable analyzer, exceed the permitted emission limits, the permittee or third party shall notify the District and return the NOx and CO concentrations to the permitted emission limits as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed the permitted emission limits after (1) hour, the permittee shall conduct a source test within 60 days, of the first exceedance to demonstrate compliance with the permitted emission limits. [District Rule 4305], [Federally Enforceable Through Title V]
7. Source testing to measure NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305 & Rule 4351], [Federally Enforceable Through Title V]
8. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
9. If permittee fails any compliance demonstration for NOx and/or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305 and 4351], [Federally Enforceable Through Title V]
10. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081], [Federally Enforceable Through Title V]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
12. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
13. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, and 4351], [Federally Enforceable Through Title V]
14. This unit is included in the specific limiting condition emission limit listed in the facility wide requirements. [District NSR Rule], [Federally Enforceable Through Title V]
15. Permittee shall maintain records of fuel hhv and cumulative annual fuel use. [District Rule 4351], [Federally Enforceable Through Title V]
16. Permittee shall maintain the following daily records: fuel type and amount used, permitted emissions factors and daily emissions for each air contaminant emitted. [District NSR Rule], [Federally Enforceable Through Title V]

17. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rule 4201 and District Rule 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]

18. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

19. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(amended December 16,1993). [District Rule 1081, and Kern County Rule 108.1], [Federally Enforceable Through Title V]

20. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.3.2 and 40 CFR 60.48c(g)], [Federally Enforceable Through Title V]

21. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

22. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]

23. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be quarterly. If a quarterly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

24. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

25. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

26. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 4305, 6.2.1; and 4351, 6.2.1], [Federally Enforceable Through Title V]

27. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 4801], [Federally Enforceable Through Title V]

28. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1], [Federally Enforceable Through Title V]

29. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2], [Federally Enforceable Through Title V]

30. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081(amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

31. The owner or operator shall install an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in fuel gases before being burned in any fuel gas combustion device. The span value for this instrument is 425 mg/dscm H2S. The performance evaluations for this H2S monitor shall use Performance Specification 7. Method 11 shall be used for conducting the relative accuracy evaluations. [40 CFR Part 60, Subpart J, 60.105(a)(4)(i)(iii)], [Federally Enforceable Through Title V]

32. Continuous emissions monitoring (CEM) results shall be calculated on a rolling three (3) hour average. [40 CFR 60.105(e)], [Federally Enforceable Through Title V]

33. H2S removal system and monitor shall meet the requirements of New Source Performance Standards Subpart J - Standards of Performance for Petroleum Refineries. [District Rule 4001 Subpart J], [Federally Enforceable Through Title V]

34. Permittee shall maintain records of the occurrence of and duration of any startup, shutdown, or malfunction in the operation of the boiler, or any malfunction of the air pollution control equipment. [District Rule 2520, 9.3.2 & District Rule 4001 Subpart J], [Federally Enforceable Through Title V]

35. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

36. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

37. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2], [Federally Enforceable Through Title V]

38. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4], [Federally Enforceable Through Title V]

39. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5], [Federally Enforceable Through Title V]

40. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1], [Federally Enforceable Through Title V]

41. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2], [Federally Enforceable Through Title V]

42. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4], [Federally Enforceable Through Title V]

43. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5], [Federally Enforceable Through Title V]

44. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6], [Federally Enforceable Through Title V]

45. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1], [Federally Enforceable Through Title V]

46. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2], [Federally Enforceable Through Title V]

47. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1], [Federally Enforceable Through Title V]

48. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2], [Federally Enforceable Through Title V]

49. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3], [Federally Enforceable Through Title V]

50. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2], [Federally Enforceable Through Title V]

51. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1], [Federally Enforceable Through Title V]

52. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2], [Federally Enforceable Through Title V]

53. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3], [Federally Enforceable Through Title V]

54. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1], [Federally Enforceable Through Title V]

55. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2], [Federally Enforceable Through Title V]

56. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2], [Federally Enforceable Through Title V]

57. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3], [Federally Enforceable Through Title V]

58. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1 & 4452, 6.2.1], [Federally Enforceable Through Title V]

59. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

60. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-43-2 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
115 BHP DIESEL FIRED DETROIT EMERGENCY/STANDBY IC ENGINE (MODEL 5063-7000) DRIVING A 600 CFM INGERSOLL RAND COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201], [Federally Enforceable Through Title V]
2. The engine shall be operated as a standby engine as defined in Rule 4701 (Amended November 12, 1998). [District Rule 4701], [Federally Enforceable Through Title V]
3. The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance and testing purposes shall not exceed 200 hours per year. Engine shall not be used in conjunction with any voluntary utility demand reduction program. [District NSR Rule and District Rule 4701], [Federally Enforceable Through Title V]
4. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [District Rule 407 (Kern)], [Federally Enforceable Through Title V]
5. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
6. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. Sulfur compound emissions shall not exceed 0.2% by volume (2,000 ppmv), on a dry basis average over 15 consecutive minutes. [District Rule 4801], [Federally Enforceable Through Title V]
8. The permittee shall maintain all records of required monitoring data and support information, including but not limited to date, number of hours of emergency and non-emergency operation, and sulfur content of the diesel fuel used. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2520, Section 9.4.2 and District Rule 4701], [Federally Enforceable Through Title V]
9. Note: This unit is also permitted as S-33-350. [District Rule 2010]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-44-1 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
120 BHP DETROIT DIESEL, DIESEL-FIRED EMERGENCY I.C. ENGINE USED TO POWER A COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201], [Federally Enforceable Through Title V]
2. The engine shall be operated as a standby engine as defined in Rule 4701 (Amended November 12, 1998). [District Rule 4701], [Federally Enforceable Through Title V]
3. The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance and testing purposes shall not exceed 200 hours per year. Engine shall not be used in conjunction with any voluntary utility demand reduction program. [District Rule 4701], [Federally Enforceable Through Title V]
4. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [District Rule 407 (Kern)], [Federally Enforceable Through Title V]
5. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
6. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. Sulfur compound emissions shall not exceed 0.2% by volume (2,000 ppmv), on a dry basis average over 15 consecutive minutes. [District Rule 4801 and District Rule 407 (Kern)], [Federally Enforceable Through Title V]
8. The permittee shall maintain all records of required monitoring data and support information, including but not limited to date, number of hours of emergency and non-emergency operation, and sulfur content of the diesel fuel used. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2520, Section 9.4.2 and District Rule 4701], [Federally Enforceable Through Title V]
9. Note: This unit is also permitted as S-33-377. [District Rule 2010]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-45-2 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
250 BHP JOHN DEERE MODEL 6081AF001 EMERGENCY/STANDBY DIESEL FIRED IC ENGINE EQUIPPED WITH TURBOCHARGER, AFTERCOOLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM, DRIVING A 150 KW KOHLER MODEL 150R0ZJ ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201], [Federally Enforceable Through Title V]
2. The engine shall be operated as a standby engine as defined in Rule 4701 (Amended November 12, 1998). [District Rule 4701], [Federally Enforceable Through Title V]
3. The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance and testing purposes shall not exceed 200 hours per year. Engine shall not be used in conjunction with any voluntary utility demand reduction program. [District NSR Rule and District Rule 4701], [Federally Enforceable Through Title V]
4. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [District NSR Rule and District Rule 407 (Kern)], [Federally Enforceable Through Title V]
5. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
6. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
7. Sulfur compound emissions shall not exceed 0.2% by volume (2,000 ppmv), on a dry basis average over 15 consecutive minutes. [District Rule 4801 and District Rule 407 (Kern)], [Federally Enforceable Through Title V]
8. The engine shall be operated with the timing retarded four degrees from the manufacturer's standard recommended timing. [District NSR Rule], [Federally Enforceable Through Title V]
9. Emissions shall not exceed 7.03 g NOx/hp-hr. [District NSR Rule], [Federally Enforceable Through Title V]
10. The permittee shall maintain all records of required monitoring data and support information, including but not limited to date, number of hours of emergency and non-emergency operation, and sulfur content of the diesel fuel used. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2520, Section 9.4.2 and District Rule 4701], [Federally Enforceable Through Title V]
11. Note: This IC engines in also permitted as S-33-382. [District Rule 2010]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-34-46-1 **EXPIRATION DATE:** 08/31/2007

EQUIPMENT DECRIPTION:
SMALL SOLVENT DEGREASER

PERMIT UNIT REQUIREMENTS

1. The small solvent degreaser shall be in good operating condition and operated in accordance with the manufacturer's recommendations when the process equipment is in operation. [District Rule 2080], [Federally Enforceable Through Title V]
2. Equipment shall be operated in such a manner that liquid surface area shall not exceed 1.0 sq. ft. [District Rule 4662], [Federally Enforceable Through Title V]
3. Permittee shall maintain records of the following: type of solvent, chemical composition, physical properties, and amount of each organic solvent used. [District Rules 1070 & 4661], [Federally Enforceable Through Title V]
4. All records shall be maintained for a minimum of five years and be made readily available to the District upon request. [District Rule 1070], [Federally Enforceable Through Title V]